

Glendell Continued Operations SSD-9349 and SSD-5850-Mod-4

Statement of Reasons for Decision

Dianne Leeson (Chair) Adrian Pilton Professor Snow Barlow

28 October 2022

Glendell Continued Operations – SSD 9349 and SSD 5850 Mod 4 Final Report © State of New South Wales through the Independent Planning Commission 2022

Independent Planning Commission NSW Suite 15.02, Level 15, 135 King Street Sydney NSW Australia

Telephone: (02) 9383 2100 Email: ipcn@ipcn.nsw.gov.au

ABN: 38755709681

Disclaimer:

While every reasonable effort has been made to ensure that this document is correct at the time of publication, the State of New South Wales, its agencies and employees, disclaim all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.

The Independent Planning Commission NSW advises that the maps included in the report are intended to give visual support to the discussion presented within the report. Hence information presented on the maps should be seen as indicative, rather than definite or accurate. The State of New South Wales will not accept responsibility for anything, or the consequences of anything, done or omitted to be done in reliance upon the mapped information.

EXECUTIVE SUMMARY

The NSW Independent Planning Commission has determined to refuse consent to the Glendell Continued Operations Project (SSD-9349) and associated application to modify the Mount Owen Continued Operations Project (SSD-5850-Mod-4) (collectively, the Application). The Application, made by subsidiaries of Glencore Coal Pty Limited (the Applicant), relates to the extension of coal mining at the existing Glendell mine in the Hunter Valley.

The Commission, constituted for this determination by Commissioners Dianne Leeson (Chair), Adrian Pilton and Professor Snow Barlow, found that the Application had significant and irreversible impacts on the historic heritage of the Ravensworth Homestead complex, comprised of colonial buildings and historic gardens in an agricultural setting, located within the proposed mine site. The Commission concluded that because of these impacts, the site is not suitable for the development and the Application is not in the public interest.

In reaching its determination, the Commission agreed with the views of the Department of Planning and Environment, Heritage NSW and the Applicant that the Ravensworth Homestead complex has local and State heritage significance, with elements of high to exceptional significance. The Commission found that:

- the significance of the Ravensworth Homestead complex must be understood within its landscape setting, not just in terms of its buildings;
- the removal and relocation of the Ravensworth Homestead complex from the site would result in significant and irreversible impacts and constitute a significant loss to future generations;
- the significant and irreversible impact to the heritage value of the Ravensworth Homestead complex that would occur if the Application were to proceed is not consistent with the conservation principles established under the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance 2013* ('the Burra Charter') or the principle of inter-generational equity as it applies under the *Environmental Planning and Assessment Act 1979* (EP&A Act);
- the Applicant maintains that retention of the Ravensworth Homestead complex in situ
 would render the Application economically unviable and advised that it would not
 proceed with the Application if consent for a restricted mining footprint was granted
 requiring a stand-off distance from the Ravensworth Homestead complex;
- the likely impacts associated with the removal and relocation of the Ravensworth Homestead complex warrant the conclusion that the Application is not in the public interest, despite its likely benefits; and
- in the absence of any viable alternatives to retain the Ravensworth Homestead complex in situ, and when considered in respect of the relevant objects of the EP&A Act and principles of ecologically sustainable development, the heritage impacts associated with the Application cannot be appropriately managed and therefore the Application must be refused.

The Commission also considers that the Application would harm Aboriginal cultural heritage values.

The Commission acknowledged that the Application would result in positive employment and economic and social benefits, and found that other key issues associated with the Application – including greenhouse gas emissions, mine rehabilitation, water impacts (groundwater, surface water and the final void), biodiversity impacts, social impacts, traffic and transport and issues associated with noise, vibration, air quality and visual impacts – could be appropriately

i

managed if the significant and irreversible impacts to historic heritage could have been avoided. As such, these issues were not reasons for refusal of the Application.

Similarly, the Commission considered whether the significant and irreversible heritage impacts of the Application could be appropriately managed if the Application were approved. Given, however:

- the Commission's finding that removal and relocation of the Ravensworth Homestead complex is not justified; and
- the Applicant's position that it would not proceed with the Application if a condition were imposed requiring a stand-off distance from the Ravensworth Homestead complex,

the Commission could not impose conditions that in its view would appropriately manage the heritage impacts of the Application.

CONTENTS

EXECU.	TIVE SUMMARY	i
DEFINE	D TERMS	2
1 INT	RODUCTION	4
2 THI	E APPLICATION	4
2.1	Site and Locality	4
2.2	Existing Operations	6
2.3	The Application	7
3 THI	E COMMISSION'S CONSIDERATION	7
3.1	Material Considered by the Commission	7
3.2	Strategic Context	8
3.3	Statutory Context	10
3.4	Mandatory Considerations	12
3.5	Additional Considerations	14
3.6	The Commission's Meetings	14
3.7	Virtual Site Inspection	15
3.8	Public Hearing	15
3.9	Locality Tour	16
3.10	Physical Site Inspection	16
4 CO	MMUNITY PARTICIPATION & PUBLIC SUBMISSIONS	16
4.1	Community Group Attendance at the Virtual Site Inspection	16
4.2	Public Hearing	16
4.3	Public Submissions	16
4.4	Topic Analysis	17
5 KE	Y ISSUES	19
5.1	Heritage	19
5.2	Greenhouse Gas Emissions	31
5.3	Economics	34
5.4	Rehabilitation and Final Landform	36
5.5	Water Resources	36
5.6	Biodiversity	37
5.7	Social Impacts	38
5.8	Noise and Vibration	39
5.9	Air Quality	40
5.10	Visual Amenity	40
5.11	Traffic and Transport	41
5.12	Voluntary Planning Agreement	42
6 CO	NCLUSION: THE COMMISSION'S FINDINGS AND DETERMINATION	43
Append	lix A – KEY COMPONENTS OF THE APPLICATION	46

DEFINED TERMS

ABBREVIATION	DEFINITION		
AAIA	Aboriginal Archaeology Impact Assessment		
ACHA	Aboriginal Cultural Heritage Assessment		
AHD	Australian Height Datum		
AIP	NSW Aquifer Interference Policy 2012		
Applicant	Glendell Tenements Pty Limited (the applicant for SSD-9349) and Mt Owen Pty Ltd (the applicant for SSD-5850-Mod-4)		
Application	Glendell Continued Operations Project (SSD-9349) and associated modification to the Mount Owen Continued Operations Project development consent (SSD-5850-Mod-4)		
AR	Department's Assessment Report (dated February 2022)		
AR para	Paragraph of the AR		
ATSIHP Act	Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)		
BDAR	Biodiversity Development Assessment Report		
BSAL	Biophysical Strategic Agricultural Land		
BVST	Broke Village Square Trust		
СВА	Cost Benefit Analysis		
CCPF	NSW Climate Change Policy Framework		
CHPP	Coal Handling and Preparation Plant		
CO ₂	Carbon Dioxide		
Commission	NSW Independent Planning Commission		
Council	Singleton Council		
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Commonwealth) (formerly known as the Department of Agriculture, Water and the Environment)		
Department	Department of Planning and Environment		
EIA	Economic Impact Assessment		
EIS	The Environmental Impact Statement titled <i>Glendell Continued</i> Operations Project Environmental Impact Statement (dated 29 November 2019), prepared by Umwelt on behalf of the Applicant		
EP&A Act	Environmental Planning and Assessment Act 1979		
EPA	Environment Protection Authority		
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999		
EPI	Environmental Planning Instrument		
ESD	Ecologically Sustainable Development		
First Submission	The Commission invited submissions between 22 February 2022 and 28		
Period	March 2022		
Gateway Panel	Mining and Petroleum Gateway Panel		
GHG	Greenhouse gas		
IESC	The Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development		
Leo Report	The report prepared for the Commonwealth Minister in June 2021 by Mr Daniel Leo for the purposes of Section 10 of the ATSIHP Act		
LGA	Local Government Area		
Mandatory Considerations	Relevant mandatory considerations, as provided in s 4.15(1) of the EP&A Act		
Material	The material set out in section 3.1Error! Reference source not found.		

Minister's Request	Request from the then Minister for Planning and Public Spaces, dated 9 September 2021, for the Commission to conduct a Public Hearing and determine SSD-9349
Mt	Million tonnes
Mt CO ₂ -e	Million tonnes carbon dioxide equivalent
Mtpa	Million tonnes per annum
Net Zero Plan	Net Zero Plan Stage 1: 2020-2023 Implementation Update
NGERS	National Greenhouse and Energy Reporting Scheme
NIA	Noise Impact Assessment
NPV	Net Present Value
PCWP	Plains Clans of the Wonnarua People
RAPs	Registered Aboriginal Parties
Ravensworth	The Ravensworth Homestead complex on the Site, comprising the
Homestead complex	Homestead (main house) and associated outbuildings, including the barn, stables, privy, men's quarters building, yard areas, paddocks and associated gardens and landscape features.
Ravensworth Estate	The lands comprising the former Ravensworth Estate, an historic pastoral property established in 1824 and owned by Dr. James Bowman, and one of the first land grants established during European settlement in the Hunter Valley. The existing Ravensworth Homestead complex is located on the former Ravensworth Estate.
Regional Plan	Hunter Regional Plan 2036
ROM	Run-of-mine
RtS	The Response to Submissions report, including 'Part A' dated 25 May 2020 and 'Part B' dated 2 September 2020, prepared by Umwelt on behalf of the Applicant
SEARs	Planning Secretary's Environmental Assessment Requirements
Second Submission Period	The Commission invited submissions between 13 April 2022 and 22 April 2022
SEPP Planning Systems	State Environmental Planning Policy (Planning Systems) 2021
SEPP Resources and Energy	State Environmental Planning Policy (Resources and Energy) 2021
SIA	Social Impact Assessment
Singleton LSPS	Singleton Local Strategic Planning Statement 2041
Site	The Glendell mine within the Mount Owen Complex located approximately 20 kilometres north-west of Singleton and 24 kilometres south-east of Muswellbrook
SLEP 2013	Singleton Local Environmental Plan 2013
SRLUP	Upper Hunter Strategic Regional Land Use Plan
SSD	State Significant Development
Third Submission Period	The Commission invited submissions between 14 June 2022 and 5pm 21 June 2022
UNFCCC Paris Agreement	United Nations Framework Convention on Climate Change Paris Agreement 2015
WNAC	Wonnarua Nation Aboriginal Corporation

1 INTRODUCTION

- 1. On 9 September 2021, the then Minister for Planning and Public Spaces made a request (Minister's Request) under section 2.9(1)(d) of the Environmental Planning and Assessment Act 1979 (EP&A Act) for the NSW Independent Planning Commission (Commission) to conduct a Public Hearing and determine the State significant development (SSD) application for the Glendell Continued Operations Project (SSD-9349) and associated modification to the Mount Owen Continued Operations Project development consent (SSD-5850-Mod-4) within 12 weeks of receiving the Department of Planning and Environment's (Department) assessment report (AR) in respect of the project.
- 2. On 22 February 2022, the Department referred SSD-9349 and SSD-5850-Mod-4 to the Commission for determination. The Glendell Continued Operations Project application (SSD-9349) was made by Glendell Tenements Pty Limited and the associated modification to the Mount Owen Continued Operations Project development consent (SSD-5850-Mod-4) was made by Mt Owen Pty Ltd (together referred to as the Applicant). For the purposed of this Statement of Reasons, both SSD-9349 and SSD-5850-Mod-4 are together referred to as the Application.
- 3. The Application seeks approval to extend the life of existing mining operations at the site by establishing a new mining area, as shown in **Figures 1 and 2** below and described at **Appendix A**.
- 4. In accordance with section 4.5 of the EP&A Act and clause 2.7(1) of State Environmental Planning Policy (Planning Systems) 2021 (SEPP Planning Systems), the Commission is the consent authority for SSD-9349 because the Department received more than 50 objections during public exhibition of the Application. The Commission has been delegated the function of determining SSD-5850-Mod 4 by the Minister for Planning (Minister) under an Instrument of Delegation signed by the then Minister for Planning on 14 September 2011.
- 5. Professor Mary O'Kane AC, Chair of the Commission, nominated Commissioners Dianne Leeson (Chair), Adrian Pilton and Professor Snow Barlow to constitute the Commission Panel determining the Application.

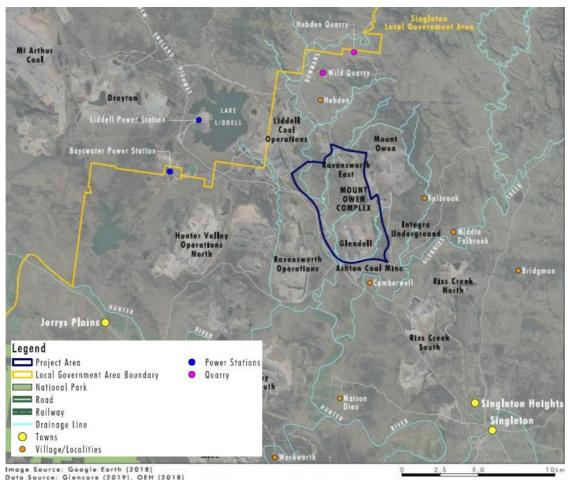
2 THE APPLICATION

2.1 Site and Locality

- 6. The site is located in the Hunter Valley region of New South Wales and within the Singleton Local Government Area (**LGA**). The 'site' for the purposes of this Statement of Reasons is comprised of the existing Glendell mine within the Mount Owen complex (**Site**) located in the Upper Hunter Valley.
- 7. The Site is located approximately 20 kilometres north-west of Singleton and 24 kilometres south-east of Muswellbrook. It is surrounded by the villages of Camberwell (approximately one kilometre from the southern boundary of the existing Glendell mine) and Middle Falbrook (approximately five kilometres to the west). The Site is on Wonnarua country, and within the administrative area of the Wanaruah Local Aboriginal Land Council. Access to the Site is via Hebden Road, a local road located to the west of the Mount Owen complex.
- 8. The Site is located in the Bowmans Creek catchment, which flows south to join the Hunter River. Two ephemeral tributaries of Bowmans Creek, known as Yorks Creek and Swamp Creek, drain in a south-west direction to Bowmans Creek and are located in the proposed extension area.
- 9. The location of the Site is illustrated in

10. **Figure 1** below. The proposed layout of the Application is illustrated in **Figure 2**.

Figure 1 Site Location (source: Department's AR, Figure 1)



- 11. Land in the vicinity of the Site has been historically cleared of native vegetation and has been extensively grazed since the late 1820s. Paragraph 429 of the Department's AR (AR para) states that the proposed mine disturbance area predominantly comprises regrowth vegetation, with small patches of remnant Eucalyptus and Angophora communities.
- 12. The Site is surrounded by other industrial land uses, including the Liddell Power Station and Bayswater Power Station to the north-west and two quarries to the north. Land surrounding the Site also supports primary industries, including the Ravensworth State Forest to the north-east, regenerated vegetation in the New Forest Area and biodiversity offsets associated with the current Mount Owen Mine (AR para 26). Agricultural enterprises and rural-residential land holdings also exist within the locality of the Site.

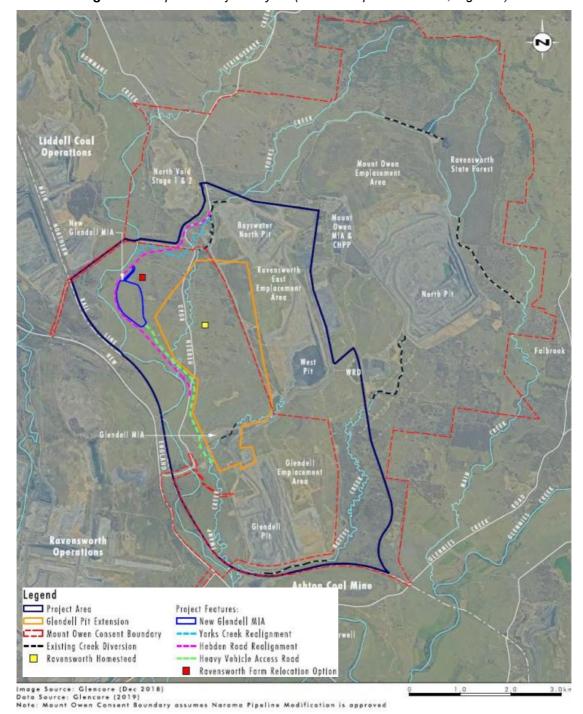


Figure 2 Proposed Project Layout (source: Department's AR, Figure 3)

2.2 Existing Operations

- 13. The Department's AR states that the Glendell mine was originally approved by the then Minister for Planning and Environment on 2 May 1983 (DA 80/952). The original production rate was 3.6 million tonnes per annum (**Mtpa**) of run-of-mine (**ROM**) coal. Following preparation works, mining commenced at the Site in 2009 (AR para 3).
- 14. The Commission notes that the Glendell consent has been modified four times and currently allows for open cut mining operations until 30 June 2024 (AR para 5). The current consent permits:

- mining of up to 4.5 Mtpa of ROM coal using a truck and excavator fleet;
- operations 24 hours per day, 7 days per week;
- emplacement of overburden within the Glendell Pit and in adjacent out-of-pit emplacements, up to a height of approximately 160 metres Australian Height Datum (AHD);
- one final void in the north of the Glendell Pit; and
- transport of ROM coal to the Mount Owen Coal Handling and Preparation Plant (CHPP) for processing and transport.
- 15. Coal mined at the Glendell mine is currently processed at the Mount Owen CHPP, which is regulated by development consent SSD-5850. The Mount Owen consent permits:
 - processing of up to 17 Mtpa of ROM coal at the Mount Owen CHPP;
 - tailings disposal in approved voids, including at the Ravensworth East Mine;
 - transport of coal from the Site by rail to the Port of Newcastle, or by conveyor to the Bayswater and/or Liddell Power Stations;
 - a private conveyor to carry up to 2 Mtpa of ROM coal and/or crushed gravel to the Liddell Coal Mine and/or Ravensworth Coal Terminal; and
 - processing operations 24 hours per day, 7 days per week (AR para 6).
- 16. The Application would rely on existing infrastructure, including the Mount Owen CHPP, rail loop and existing Glendell mining fleet.

2.3 The Application

- 17. The Application proposes continued mining at the Site by extending existing open cut mining operations to the north of the current Glendell Pit. Operations at the Site, which are currently approved under DA 80/952 to June 2024, would be extended until December 2045. The Application proposes extraction of an additional 135 Mt of ROM coal using open cut mining methods. All coal would continue to be processed using the existing Mount Owen CHPP facility (subject to a modification of SSD-5850).
- 18. The Application is detailed in the Applicant's Environmental Impact Statement (**EIS**), dated 29 November 2019. The main components of the Application compared to operations under the existing approval are set out in **Appendix A**.

3 THE COMMISSION'S CONSIDERATION

3.1 Material Considered by the Commission

- 19. In making its determination in relation to the Application, the Commission has carefully considered the following material (**Material**), along with other documents referred to in this Statement of Reasons:
 - the Planning Secretary's Environmental Assessment Requirements (**SEARs**) issued by the Department, dated 12 August 2019;
 - the Applicant's EIS, dated 29 November 2019, and its accompanying appendices;
 - all submissions made to the Department in respect of the Application during the public exhibition of the EIS, from 11 December 2019 to 14 February 2020, including submissions from members of the public, community organisations and public authorities;
 - the Applicant's Response to Submissions (RtS) (Part A), dated 25 May 2020, and RtS (Part B), dated 2 September 2020, and its accompanying appendices;
 - advice from the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC), dated 11 March 2020, as

- requested by the Department of Climate Change, Energy, the Environment and Water (**DCCEEW**) (formerly known as the Department and the Commonwealth Department of Agriculture, Water and the Environment);
- all additional agency advice received by the Department in respect of the Application;
- all additional information provided by the Applicant, including responses to requests for information sought by the Department;
- the Department's AR, dated February 2022, including material considered in that report;
- all matters raised at stakeholder meetings held with the Commission;
- all speaker comments made to the Commission at the two-day Public Hearing held on 18 and 21 March 2022, and all material presented at the Public Hearing:
- all written submissions received and accepted by the Commission;
- correspondence from the Applicant to the Commission dated 23 March 2022 and 6 May 2022;
- correspondence from the Department to the Commission dated 8 March 2022, 30 March 2022, 29 April 2022, 19 May 2022, 10 June 2022, 4 July 2022 and 22 July 2022;
- correspondence from the Heritage Council to the Commission dated 1 July 2022;
- correspondence from the Plains Clans of the Wonnarua People (**PCWP**) to the Commission dated 17 March 2022; and
- documents related to the separate application made to the Commonwealth government under Section 10 of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth) (ATSIHP Act), including further assessment by the Department and correspondence with the Applicant, DCCEEW and representatives of the PCWP (these documents have not been published by the Commission pursuant to a decision made on 10 October 2022, as described in section 5.1 below).

3.2 Strategic Context

3.2.1 Energy Policy Context

- 20. The development of policies, guidelines and plans aimed at reducing carbon emissions has progressed rapidly in recent times, both nationally and internationally (AR page vi). In determining the Application, the Commission has considered the:
 - United Nations Framework Convention on Climate Change Paris Agreement 2015 (UNFCCC Paris Agreement);
 - National Greenhouse and Energy Reporting Scheme (NGERS);
 - Australia's Long-Term Emissions Reduction Plan 2021;
 - NSW Climate Change Policy Framework (CCPF);
 - Memorandum of Understanding NSW Energy Package; and
 - Net Zero Plan Stage 1: 2020-2023 Implementation Update (Net Zero Plan).

3.2.2 Strategic Statement on Coal Exploration and Mining in NSW

- 21. In June 2020, the NSW Government released its *Strategic Statement on Coal Exploration and Mining in NSW*, which sets out its approach to support responsible coal production and transition to a low carbon future, consistent with Australia's commitments under the UNFCCC Paris Agreement.
- 22. The NSW Government has identified regions in the state where mining is not supported or is prohibited. The Commission notes that the Site is not located on any of those prohibited areas (AR para 75).

3.2.3 Hunter Regional Plan 2036

- 23. The *Hunter Regional Plan 2036* (**Regional Plan**) was adopted by the Department in October 2016. It provides the strategic direction and land use planning priorities for the Hunter region for the next 20 years. The Regional Plan applies to the Singleton LGA and therefore applies to the Site.
- 24. The Regional Plan identifies the Hunter Valley region as "the leading regional economy in Australia, with thriving communities and a biodiversity-rich natural environment" (page 8). It states that parts of the Hunter region, particularly the Upper Hunter, will undergo a transition in coming years in the context of changes to the mining and power generation sectors (page 17).
- 25. Key strategic directions relevant to the Application include:
 - *Direction 5*: transform the productivity of the Upper Hunter;
 - Direction 11: manage the ongoing use of natural resources;
 - Direction 12: diversify and grow the energy sector;
 - Direction 13: plan for greater land use compatibility; and
 - *Direction 19*: identify and protect the region's heritage.
- 26. The Commission has considered the Directions and relevant Actions of the Regional Plan in its determination of the Application.

3.2.4 Hunter Regional Economic Development Strategy 2018-2022

- 27. The Hunter Regional Economic Development Strategy 2018–2022 (Regional Economic Strategy) presents the economic development strategy for the Hunter region and was formed in collaboration with local councils, including Singleton Council.
- 28. The Regional Economic Strategy states that coal mining is the most significant industry in the Hunter region and largest single employer. It states that there does not appear to be any capacity or resource constraints that will limit coal mining in the foreseeable future and that the largest risks to the industry are macroeconomic, namely a downturn in international coal demand (page 10). The Strategy states that diversification into other industries would mitigate risks to the mining industry and help to build a more resilient economy in the Hunter (page 10).
- 29. The Commission has considered the relevant objectives of the Regional Economic Strategy in its determination of the Application.

3.2.5 Upper Hunter Strategic Regional Land Use Plan

30. The 20-year *Upper Hunter Strategic Regional Land Use Plan* (**SRLUP**) identifies key land use challenges for the Upper Hunter region. Balancing agricultural productivity while supporting the development of other industries that compete for nearby or the same land – such as mining, coal seam gas and urban expansion – is identified as a key challenge for the region (page 20).

31. The Commission notes the Department's assessment of the Application against the SRLUP (AR para 58 to 66) has considered its relevant objectives in its assessment of the Application.

3.2.6 Singleton Local Strategic Planning Statement 2041

- 32. In July 2020, the Singleton Local Strategic Planning Statement 2041 (Singleton LSPS) was endorsed by Singleton Council. It provides a 20-year land use development strategy for the Singleton LGA and identifies planning priorities to deliver its vision. The Singleton LSPS was informed by the Regional Plan and other relevant strategic plans.
- 33. The Singleton LSPS states the vision for the region is closely linked to its mining past and positions Singleton as a "leader in sustainable post-mining transition" with a focus on "diverse post-mining development outcomes" (page 24). Tourism is identified as a key growth industry as part of this transition, including viticulture, leisure and nature-based tourism (page 24).
- 34. Key Planning Priorities relevant to the Application include:
 - *Planning Priority 2.2*: the significance of heritage and cultural identity is embraced;
 - Planning Priority 3.1: biodiversity is valued, protected and enhanced;
 - Planning Priority 3.3: resources are managed efficiently and effectively;
 - Planning Priority 3.4: land rehabilitation outcomes meet the needs of current and future generations; and
 - Planning Priority 4.4: the mineral resource industry is productive, accountable and considerate of surrounding land uses.

3.3 Statutory Context

3.3.1 Permissibility

- 35. The disturbance area of the Application is located wholly within the Singleton LGA and subject to the Singleton Local Environmental Plan 2013 (SLEP 2013). All land within the proposed open cut mining area is zoned 'RU1 Primary Production' under the SLEP 2013. 'Open cut mining' is permissible with consent in the RU1 zone (AR para 77).
- 36. Clause 2.9(1) of State Environmental Planning Policy (Resources and Energy) 2021 (SEPP Resources and Energy) provides that mining may be carried out with consent on any land where development for agriculture is permissible, or in any part of a waterway that is not within an environmental conservation zone. This permissibility extends to facilities for the processing and transportation of coal. The Application is therefore permitted with consent.

3.3.2 Modification

- 37. As part of the Application, the Applicant seeks a modification to the Mount Owen complex approval (SSD-5850-Mod-4). This modification is to extend the life of the Mount Owen complex infrastructure (coal handling, processing and rail facilities) to process and transport coal produced at the Glendell mine.
- 38. The Department provided a detailed assessment of the Mount Owen modification in its letter to the Commission dated 8 March 2022. The Department notes that the proposed Glendell mine extension cannot proceed as proposed without the modification of the Mount Owen consent.

- 39. The Department's assessment of the modification considered the reasons for the granting of the original consent by the then Planning Assessment Commission. The Department is of the view that the benefits of the modification in assisting the operation of the Glendell Continued Operations Project outweigh the impacts, subject to the adherence of strict conditions (Department's letter dated 8 March 2022). The Department recommends that modification SSD-5850-Mod-4 be approved.
- 40. The Commission has considered the Department's assessment of the modification against the matters for consideration under section 4.15(1) and 4.55(3) of the EP&A Act.

3.3.3 Surrender of Development Consent

41. Section 4.4 of the Department's AR describes that if the Application were to be approved by the Commission, the Applicant would surrender the existing development consent (DA 80/952) in accordance with section 4.63 of the EP&A Act and mining operations on the Site would be regulated under the new development consent, along with the modified Mount Owen consent (SSD-5850).

3.3.4 Gateway Certificate

- 42. The Application requires a new mining lease to be issued to enable open cut mining to occur in the proposed Site area. Consequently, the provisions of clause 50A of the *Environmental Planning and Assessment Regulation 2000* apply and the Applicant is required to obtain a site verification certificate or Gateway Certificate for the Application from the Mining and Petroleum Gateway Panel (**Gateway Panel**).
- 43. The NSW Government mapped strategic agricultural land in the Upper Hunter under two categories: 'biophysical strategic agricultural land' (**BSAL**) and 'critical industry clusters' (CICs) (AR para 59). At AR para 61 to 64, the Department notes, based on the Applicant's Site Verification Report, that there is approximately 34 ha of BSAL that would be disturbed by the Application, and as such requires a Gateway Certificate.
- 44. The Gateway Panel granted a conditional Gateway Certificate in respect of the Application on 24 July 2019.

3.3.5 Commonwealth Matters

- 45. On 10 July 2019, a delegate of the Commonwealth Minister for the Environment and Energy determined that the Application is a 'controlled action' under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) due to its potentially significant impact on controlling provisions and matters protected under the EPBC Act.
- 46. The Commission notes that under the current Bilateral Agreement between the Commonwealth and NSW governments, the Commonwealth has accredited the NSW assessment process under the EP&A Act for the controlled action. The Commission also notes that the Commonwealth's decision-maker maintains a separate approval role, which will be exercised following the Commission's determination of this Application.
- 47. The Department provides an assessment of matters under the EPBC Act in Appendix H of the AR. The Commission has given further consideration to biodiversity matters in section 5.6 below.

3.3.6 IESC Advice

48. In response to a request from the Department, the IESC provided advice on the Application, dated 11 March 2020. The IESC advice is provided at Appendix D of the Department's AR. The Commission notes the Applicant provided a detailed response to the IESC advice (prepared by Umwelt, dated 7 August 2020).

3.3.7 Integrated and Other NSW Approvals

49. As per section 4.6 of the Department's AR, the Commission notes the Department consulted with the relevant government authorities that are responsible for providing integrated and other approvals.

3.4 Mandatory Considerations

50. In determining this Application, the Commission is required by section 4.15(1) of the EP&A Act to take into consideration such of the listed matters as are of relevance to the development the subject of the Application (**Mandatory Considerations**). The mandatory considerations are not an exhaustive statement of the matters the Commission is permitted to consider in determining the Application. To the extent that any of the Material does not fall within the mandatory considerations, the Commission has considered that Material where it is permitted to do so, having regard to the subject matter, scope and purpose of the EP&A Act. The Department has assessed the Application against the Mandatory Considerations at Appendix G of the AR. The Commission's consideration of the Mandatory Considerations is summarised in **Table 1** below.

Table 1 Mandatory Considerations

Mandatory Considerations	Commission's Comments
Relevant Environmental Planning Instruments (EPIs)	Appendix G of the Department's AR identifies relevant EPIs for consideration. The key EPIs (in their present, consolidated form, noting the consolidation of several relevant EPIs after the preparation of the Department's AR) include:
	SEPP Planning Systems;
	 SEPP Resources and Energy;
	 State Environmental Planning Policy (Transport and Infrastructure) 2021;
	 State Environmental Planning Policy (Resilience and Hazards) 2021;
	 State Environmental Planning Policy (Biodiversity and Conservation) 2021; and
	• SLEP 2013.
Relevant proposed EPIs	The Commission has considered relevant proposed EPIs, including the draft <i>State Environmental Planning Policy (Environment)</i> , in making its determination.
Relevant Development Control Plans	Pursuant to clause 2.10 of SEPP Planning Systems, development control plans do not apply to SSD. The Commission does not consider any development control plan to be relevant to the determination of the Application.
Likely Impacts of the Development	The likely impacts of the Application have been considered in section 5 of this Statement of Reasons.
Suitability of the Site for Development	As set out in section 5.1 of this Statement of Reasons, the Site is not suitable for the Application as carrying out the Application would significantly and irreversibly damage what the Applicant, DPE and others have characterised as the "high to exceptional" heritage values of the Ravensworth Homestead complex.

Mandatory Considerations	Commission's Comments
Objects of the EP&A Act	The Commission has carefully considered the Objects of the EP&A Act and, for the reasons set out in this Statement of Reasons, is of the view that the Application is not consistent with the Objects of the EP&A Act. Specifically, the Application does not 'facilitate ecologically sustainable development' (see below) and does not 'promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)'.
Ecologically Sustainable Development (ESD)	The Commission has given consideration to the principles of ESD in its assessment, as set out below.
	a) the precautionary principle The precautionary principle was considered by the Commission but was not a reason for refusal of the Application. The Commission found that the Application did not trigger the two threshold tests of: a threat of serious or irreversible environmental damage; and scientific uncertainty as to that environmental damage.
	b) inter-generational equity
	'Inter-generational equity' is the principle that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
	The Commission has considered inter-generational equity in its assessment of the potential environmental, social and economic impacts of the Application. The Commission finds that the Application would have significant, irreversible and detrimental long-term impacts, specifically to the existing heritage value of the Site. These impacts could be avoided by an appropriate buffer area around the Ravensworth Homestead complex in which mining is prohibited, but the Applicant and Department separately advise that such a buffer would render mining operations economically unviable.
	The Commission finds inter-generational equity would be significantly and irreversibly compromised by granting consent to the Application.
	c) conservation of biological diversity and ecological
	integrity Impacts to biological diversity and ecological integrity were considered by the Commission and were not considered to be a reason for refusal of the Application.
	d) improved valuation, pricing and incentive mechanisms
	Improved valuation, pricing and incentive mechanisms were considered by the Commission and were not considered to be a reason for refusal of the Application.
	In summary, the Commission finds that the Application is inconsistent with ESD principles because the Application cannot achieve inter-generational equity.

Mandatory Considerations	Commission's Comments	
The Public Interest	The Commission has considered whether the granting of consent to the Application is in the public interest. In doing so, the Commission has considered the predicted benefits of the Application and its predicted negative impacts.	
	The Commission has given considerable thought to the historic and Aboriginal heritage impacts of the Application, including the Applicant's proposed relocation of the Ravensworth Homestead complex from its original setting, loss of the core estate lands, removal and relocation of in situ archaeology and loss of intangible Aboriginal cultural values and cultural landscape. These matters are discussed in detail at section 5.1 of this Statement of Reasons.	
	The Commission's consideration of the public interest has been informed by consideration of the principles of ESD (principally, inter-generational equity), as discussed above. Overall, the Commission finds the Application is not in the public interest.	

3.5 Additional Considerations

- 51. In determining the Application, the Commission has also considered:
 - NSW Noise Policy for Industry (NPfI);
 - Interim Construction Noise Guideline (ICNG);
 - NSW Road Noise Policy (RNP);
 - Rail Infrastructure Noise Guideline (RING);
 - Voluntary Land Acquisition and Mitigation Policy (VLAMP);
 - NSW Aguifer Interference Policy (AIP);
 - Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (Approved Methods);
 - Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals NSW Government, 2015 (Economic Guidelines);
 - Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development (SIA Guideline); and
 - NSW Risk Assessment Guideline for Groundwater Dependent Ecosystems (GDE Guideline).

3.6 The Commission's Meetings

52. As part of its determination process, the Commission met with various persons as set out in **Table 2**. All meeting and site inspection notes have been made available on the Commission's website.

Table 2 Commission's Meetings

Meeting	Date of Meeting	Transcript/Notes Available
Virtual Site Inspection	4 March 2022	10 and 11 March 2022
Plains Clans of the Wonnarua People (PCWP)	8 March 2022	16 March 2022
Broke Village Square Trust	8 March 2022	16 March 2022
Wonnarua Nation Aboriginal Corporation (WNAC)	8 March 2022	16 March 2022
Singleton Council (General Manager and Council Officers)	8 March 2022	16 March 2022
Singleton Council (Elected Officials)	8 March 2022	16 March 2022
Department	10 March 2022	17 March 2022
Applicant	10 March 2022	17 March 2022
Public Hearing	18 and 21 March 2022	22 and 23 March 2022
Locality Tour	24 March 2022	31 March 2022
Physical Site Inspection	25 March 2022	31 March 2022
Heritage NSW	28 March 2022	31 March 2022

- 53. The meeting with the PCWP was also attended by a representative of the Environmental Defenders Office in a support capacity.
- 54. The meeting with Heritage NSW was also attended by a representative from the NSW Heritage Council and representatives from the Department.
- 55. The Commission notes that a meeting invitation was extended to DCCEEW, however that invitation was declined.

3.7 Virtual Site Inspection

56. The Applicant presented a virtual site inspection of the Site and immediate surrounds to the Commission via video conference (compromised of maps, diagrams, video footage and photographs) so the Panel could gain an understanding of the physical characteristics of the Site and locality. The virtual site inspection was recorded and the transcript and presentation material were made publicly available on the Commission's website on 10 and 11 March 2022.

3.8 Public Hearing

57. The Commission conducted a Public Hearing over two days on 18 and 21 March 2022. The Public Hearing was held electronically with registered speakers presenting to the Commission Panel via telephone or video conference. The Public Hearing was streamed live on the Commission's website. Presentations made at the Public Hearing have been considered by the Commission as submissions and are discussed further in section 4 below.

3.9 Locality Tour

58. On 24 March 2022, the Commission conducted a tour of the locality surrounding the Site. Inspection notes and a photographic log of the locality tour were made publicly available on the Commission's website on 31 March 2022.

3.10 Physical Site Inspection

59. On 25 March 2022, the Commission conducted an inspection of the Site, along with the Applicant and, for part of the inspection, the Applicant's heritage consultant. Inspection notes and a photographic log of the site inspection were made publicly available on the Commission's website on 31 March 2022.

4 COMMUNITY PARTICIPATION & PUBLIC SUBMISSIONS

4.1 Community Group Attendance at the Virtual Site Inspection

- 60. On 4 March 2022, the Commission conducted a virtual site inspection of the Site. The Commission invited representatives from community groups to attend and observe the Virtual Site Inspection. The representatives of the following groups accepted the invitation:
 - WNAC; and
 - Hunter Valley Aboriginal Corporation.

4.2 Public Hearing

61. As stated at paragraph 57, the Commission conducted an electronic Public Hearing over two days on 18 and 21 March 2022. The Commission heard from the Department, the Applicant, various community group representatives and individual community members. In total, 40 speakers presented to the Commission during the Public Hearing.

4.3 Public Submissions

- 62. The Department publicly exhibited the Application for an extended period from 11 December 2019 until 14 February 2020 and received a total of 340 public submissions on the Application, including 324 submissions from individuals and 16 from special interest groups. These submissions to the Department have been considered by the Commission in its determination of the Application.
- 63. The Commission invited written submissions from all persons between 22 February 2022 and 5pm 28 March 2022 (**First Submission Period**). In this period, the Commission received a total of 849 unique written submissions on the Application, comprising of:
 - 579 submissions in support of the Application (68%);
 - 248 submissions objecting to the Application (29%); and
 - 22 submissions commenting on the Application, neither in support nor objection (3%).
- 64. Following the First Submission Period, the Commission received additional material, for which the Panel provided an opportunity for interested parties to make further comments. The Commission invited written submissions between 13 April 2022 and 22 April 2022 (Second Submission Period) on the following information:
 - the Applicant's response (Part 1) to questions taken on notice during the Commission's meeting with the Applicant on 10 March 2022, including two attachments (letter dated 23 March 2022);
 - the Applicant's response (Part 2) to questions taken on notice during the Commission's meeting with the Applicant on 10 March 2022 (latter dated 23 March 2022);

- the transcript from the meeting between the Commission and Heritage NSW (transcript dated 28 March 2022); and
- the Department's response to questions taken on notice during the Commission's meeting with the Department on 10 March 2022 (letter dated 30 March 2022).
- 65. Excluding material that clearly did not relate to the additional material, the Commission received a total of 37 unique written submissions in the Second Submission period, comprising one submission in support, 34 objections and two comments.
- 66. The Commission invited further submissions between 14 June 2022 and 21 June 2022 (**Third Submission Period**). During this period, the Commission sought comments on the Department's response to the Commission's letter on matters relating to Aboriginal and historic heritage. The Department's response, dated 10 June 2022, is discussed in detail at section 5.1.
- 67. The Commission received a total of 13 written submissions in the Third Submission Period.

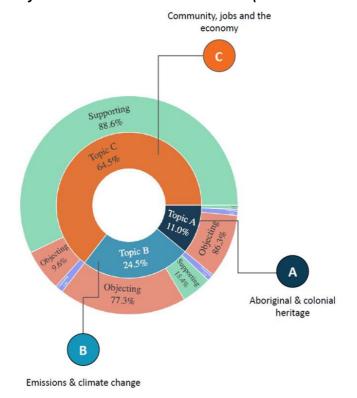
4.4 Topic Analysis

68. A submission analysis was undertaken on all submissions received by the Commission, including written submissions, submissions made through the Commission's 'Have Your Say' portal and verbal submissions made during the Public Hearing. All form letters (petitions) were treated as a single unique submission, which is consistent with the manner in which SEPP Planning Systems defines submissions. Word frequency and cluster analysis was completed on unique submissions.

First Submission Period

- 69. Key themes raised during the First Submission Period are illustrated in Figure 3.
- 70. The main topics raised relate to: Aboriginal and colonial heritage (11%); emissions and climate change (24.5%); and community, jobs and the economy (64.5%).

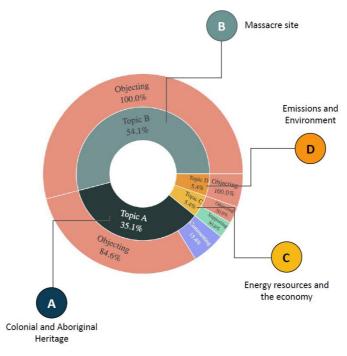
Figure 3 Key Issues – First Submission Period (source: Online Gravity)



Second Submission Period

- 71. Key themes raised during the Second Submission Period are illustrated in **Figure 4**.
- 72. The main topics raised relate to colonial and Aboriginal heritage (35.1%); massacre site (54.1%); energy resources and the economy (5.4%); and emissions and environment (5.4%).

Figure 4 Key Issues – Second Submission Period (source: Online Gravity)



Third Submission Period

73. Given that submissions were only sought on the additional information relating to heritage matters during the Third Submission Period, a graphic representation of submissions received was not prepared.

Key Issues Raised - First and Second Submission Periods

- 74. Overall, 65.5% of the total submissions received in both the First and Second submission periods and in the verbal submissions at the Public Hearing support the Application. Topics raised in support of the Application include:
 - employment generation;
 - flow-on employment benefits to suppliers and local businesses;
 - benefits to the local, regional and national economy; and
 - historical coal mining in the Hunter Valley as a local precedent.
- 75. Overall, 31.8% of the total submissions received in both submission periods and in the verbal submissions at the Public Hearing object to the Application. Topics raised in objection to the Application include:
 - Greenhouse gas (GHG) emissions, contribution to climate change and the associated inter-generational impacts;
 - impacts to Aboriginal heritage, including intangible cultural heritage;
 - impacts to colonial heritage, in particular Ravensworth Estate;
 - health impacts of air pollution;
 - amenity impacts, including dust, noise and visual impacts; and
 - impacts on local biodiversity.

76. Overall, 2.7% of the total submissions received in both submission periods and in the verbal submissions at the Public Hearing were comments neither objecting to nor supporting the Application.

Key Issues Raised - Third Submission Period

- 77. Of the 13 written submissions received by the Commission in the Third Submission Period, nine submissions objected to the Application and four submissions were in support of the Application. Topics raised during the Third Submission Period related only to heritage matters, as required by the Commission.
- 78. Submissions objecting to the Application related to:
 - the Department's response to the Commission, including concerns that it did not reasonably answer the Commission's questions;
 - the heritage significance of the Ravensworth Homestead complex;
 - the possible impacts of destruction of heritage items, including both Aboriginal and historic heritage; and
 - the social and economic impacts and/or benefits of the Application.
- 79. Submissions in support of the Application related to:
 - the Department's response to the Commission, including comments that the additional information relating to heritage does not change the positive employment opportunities of the Application; and
 - the social and economic impacts and/or benefits of the Application.

5 KEY ISSUES

5.1 Heritage

- 80. The Commission received written submissions about the Site's Aboriginal and historic heritage and heard detailed descriptions about heritage at the Public Hearing and in stakeholder meetings. The Commission also considered the detailed heritage studies prepared to assess the heritage-related impacts of the Application.
- 81. In its AR, the Department identified the potential impacts of the Application on the historic Ravensworth Homestead complex which is located approximately in the centre of the proposed mine extension as one of the most contentious issues associated with the Application (AR para 138).
- 82. The Applicant proposes to relocate the Ravensworth Homestead complex to allow for the expansion of the Glendell mine and extraction of the coal resource located below the Homestead (AR para 193).
- 83. The Commission has considered the Site's Aboriginal and historic heritage in detail in the following sections.

Heritage Context

- 84. The Site is located on the traditional lands of the Wonnarua people. The Commission understands that most local Aboriginal groups consider the region to have high cultural significance, with some groups identifying a particular attachment to the 'Ravensworth Estate', which is located on the Site (AR para 21).
- 85. The Ravensworth Estate was one of the first land grants established during European settlement in the Hunter Valley and contains the Ravensworth Homestead complex and other archaeological resources that date back to the early days of settlement (AR para 15). The Commission understands that the Singleton area was first explored by European settlers in the early 1820s and was rapidly developed because of its favourable agricultural conditions.

- 86. In 1824, the Ravensworth Estate was obtained by Dr James Bowman (1784-1846), with further grants and purchases made to the estate in the period to 1833. Dr Bowman was the colonial surgeon in charge of Sydney Hospital. He married Mary Macarthur, daughter of prominent pastoralists John and Elizabeth Macarthur, in 1823 (AR para 148). The current Ravensworth Homestead (main house) was built in 1832, with the complex expanding over time (AR para 151). In the 1841 census, there were 87 people living at the Ravensworth Estate, including 76 males (32 of whom were convicts) and 11 females (AR para 152).
- 87. The Applicant describes the Ravensworth Homestead complex in its EIS as "a formally designed farmyard complex of colonial buildings including a good example of a colonial bungalow, with stonework and roof carpentry of note. As originally built, the "H" plan bungalow is a rare feature, indicating a design (potentially) by a gentleman architect" (EIS, page 361). The EIS states that "based on a detailed comparative analysis of other colonial bungalows including a review by Dr James Broadbent, expert in colonial architecture, the Ravensworth Homestead complex is considered to be the design of an architect or gentlemen architect, most likely the Scott brothers (Robert and Helenius)...". The Scott brothers were operating in the Hunter Region in the 1820s and had a documented association with James Bowman and the Macarthur Family (EIS, page 357).
- 88. At AR paragraphs 139 and 140, the Department states:

The Estate was one of the first land grants in the Hunter Valley, and contains a homestead complex and other archaeological resources that date back to the early days of European settlement in the valley.

This resource includes evidence of early agriculture by prominent settlers, contact with local Aboriginal people, the use of convict labour, and colonial architecture.

- 89. Following Dr James Bowman's death at Ravensworth in 1846, the Estate was subdivided and carved into numerous smaller landholdings (AR para 155). However, since the late 1990s, the intensification of coal mining in the Hunter Valley resulted in much of the original 10,000-acre grant being reconsolidated, with Glencore now owning most of the original land grant (AR para 157).
- 90. The Commission notes that some stakeholders, including the Heritage Council and the PCWP Aboriginal group, suggest that the Homestead site is highly significant for its association with frontier conflict between European and Aboriginal people, including a reported massacre (AR para 172). The Commission notes that "conflicts occurred at several places across the Hunter Valley" and "violence was not unusual in the colonial period of NSW" (AR para 180). Incidents in the Hunter Valley were "sporadic and isolated, with no 'frontline' or central focus" (AR para 180). This is discussed further below.

Historic Heritage Significance

- 91. The Ravensworth Homestead complex is listed as an item of local heritage significance under the SLEP 2013 (Item Number I41).
- 92. Numerous assessments have been undertaken to assess the significance of the Ravensworth Homestead complex and the heritage-related impacts of the Application. These include heritage and archaeological assessments prepared by the Applicant, and assessments prepared by independent experts engaged by the Department, including a heritage assessment, mine planning assessment (to consider alternative mine plan options that would retain the Homestead complex in-situ) and an economic review of the alternative mine plans.

- 93. Both the Applicant's consultants and the Heritage Council are of the view that elements of the Ravensworth Homestead complex are of State heritage significance (AR para 164).
- 94. The Applicant, in its Statement of Significance (prepared by Lucas Stapleton Johnson & Partners, dated November 2019), considers that "the entire Ravensworth Estate, the core estate lands, and the Ravensworth Homestead complex are of high to exceptional significance" (AR para 167), concluding that the Ravensworth Homestead complex has both State and local heritage significance.
- 95. Further, the Applicant's Statement of Significance states:
 - ...the place has the potential to provide information, by way of further study and archaeological investigation, into colonial building techniques, 19th century lifestyles, agricultural and horticultural practices and the working lives of convicts in a non-institutional setting, which is considered very rare (Executive Summary).
- 96. Although the Applicant acknowledges that the Ravensworth Homestead complex has heritage value, it considers that the socioeconomic benefits of the Application outweigh the heritage impacts. During the Public Hearing, the Applicant stated:
 - ...the project requires access to the full resource and the relocation of Ravensworth Homestead in order for the project to be viable. We have assessed alternate mine plan options that leave the homestead in place... and these have been found not to be viable and subsequently would not be pursued by Glencore. We've maintained the homestead since the late 1990s so we recognise the homestead's heritage significance and committed to sensitively moving the homestead in order to conserve it. We believe the opportunity to provide the homestead with a new life along with the associated socioeconomic benefits of the mine are greater than any benefit of the homestead staying in place (Day 1 Transcript, page 24).
- 97. The Department considers that the Ravensworth Homestead complex and the surrounding 'core estate lands' have "State and local heritage significance, with elements of high to exceptional significance" (AR para 255).
- 98. However, overall, the Department states:
 - Given the available mitigation measures, the Department does not believe that the heritage values of the homestead outweigh the social and economic benefits of the coal resource such that it would warrant retention of the heritage item in-situ (AR para 257).
- 99. The Commission understands that the Heritage Council is of the view that the Ravensworth Homestead complex has significant heritage value. AR para 168 states:
 - The Heritage Council notes that the Ravensworth Homestead is one of 19 places identified as a very early homestead in the Hunter Valley (in a 2013 Heritage Council study), and considers it to be of State heritage significance for its aesthetic, historic, scientific and social values.
- 100. The Commission notes that "the Heritage Council has recommended [the Ravensworth Homestead complex] for nomination on the State Heritage Register" (AR para 164).

- 101. On 28 March 2022, the Commission met with officers of Heritage NSW and the Chair of the Heritage Council. The meeting was also attended by representatives of the Department. In the meeting, it appeared that Heritage NSW's position on the proposed relocation of the Ravensworth Homestead complex had progressed from what was described in the Department's AR. Accordingly, the Commission, in a letter dated 6 April 2022, requested the Department provide a further assessment of the anticipated impacts of the Application on matters relating to both Aboriginal and historic heritage, in consultation with Heritage NSW and the Heritage Council. In its letter to the Department, the Commission asked the Department to undertake further assessment of the Aboriginal and historic heritage issues by responding to the following three points in consultation with Heritage NSW (summarised):
 - clarify how the current position of Heritage NSW affects the recommendations put forward in the Department's AR and recommended conditions of consent;
 - confirm whether the Department maintains its view that the social and economic benefits of the Application still outweigh the heritage values of the Ravensworth Homestead complex; and
 - clarify, with input from the Heritage Council, whether the currently delayed recommendation to list the complex on the State Heritage Register (per the footnote to [17] in the Assessment Report) is to be revived and if not, why not.
- 102. On 10 June 2022, the Commission received the Department's response, including an attached letter from Heritage NSW. The Department summarised Heritage NSW's advice in its letter. The advice is further summarised as follows:
 - neither Heritage NSW nor the Heritage Council have expressed a view on whether the Homestead is of national significance;
 - it is Heritage NSW's view that the Ravensworth Homestead complex is connected to the story of dispossession and displacement of Aboriginal people in the region;
 - the Ravensworth Homestead complex is one of the most unique and intact Homesteads in the Hunter Valley;
 - the Ravensworth Homestead complex is of high to exceptional heritage significance and elements of the complex are of State heritage significance; and
 - the removal and relocation of the Ravensworth Homestead would threaten its authenticity and pose a significant risk to the integrity of its fabric (page 1).
- 103. The Department advised that its review of the additional information provided by Heritage NSW in its letter dated 6 June 2022 does not affect or alter its assessment of the heritage-related impacts of the Application, and that its conclusions and recommendations in relation to the Application remain the same.
- 104. The Department "acknowledges that the Ravensworth Homestead and the surrounding core estate lands have local and State heritage significance, with elements of high to exceptional significance" (10 June 2022 letter from the Department, page 2) and restated its view that "any heritage impacts resulting from relocating the Ravensworth Homestead do not outweigh the social and economic benefits of the project" (page 3). It "believes that the Ravensworth Homestead could be relocated" and considers that the impacts of relocation "could be mitigated, particularly through the intact relocation of the homestead to an undisturbed part of the broader Ravensworth Estate" (page 3).

- 105. The Department states that despite the Ravensworth Homestead complex being nominated for listing on the State Heritage Register by the Heritage Council, the statutory process for listing, as outlined in section 33 of the *Heritage Act 1977*, has not commenced. The Department is therefore "unable to confirm whether or not the Homestead (or other parts of the Ravensworth Estate) would ultimately be listed on the State Heritage Register" (10 June 2022 letter from the Department, page 2).
- 106. In correspondence from the Heritage Council to the Commission dated 1 July 2022, the Heritage Council provided a document titled 'Clarification of Heritage Council statements in IPC Meeting 28 March 2022', which included the following statement:
 - With respect to potential recommendation to list on the State Heritage Register, the Minutes of the 6 April 2021 meeting of the Heritage Council p4 indicate that if the IPC finds against the mine expansion, the Council will proceed with a nomination to recommend the listing of Ravensworth to the Minister responsible for heritage.
- 107. In forming its view, the Commission has considered Heritage NSW's Assessing Heritage Significance guidelines, which includes seven criteria for assessment. Only one criterion is necessary to determine that something is significant enough for listing. The Ravensworth Homestead complex appears to meet all seven criteria.
- 108. Further, the Commission has also considered the Burra Charter and its accompanying guidelines, which are considered the best practice standard for cultural heritage management in Australia. Although the Commission notes the Burra Charter is not determinative for this Application, it has given consideration to its principles with regard to the appropriateness of relocating heritage items.
- 109. Article 9 of the Burra Charter relates to 'location' and states the following:
 - **9.1** The physical location of a *place* is part of its *cultural significance*. A building, work or other element of a place should remain in its historical location. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.
 - **9.2** Some buildings, works or other elements of *places* were designed to be readily removable or already have a history of relocation. Provided such buildings, works or other elements do not have significant links with their present location, removal may be appropriate.
 - **9.3** If any building, work or other element is moved, it should be moved to an appropriate location and given an appropriate *use*. Such action should not be to the detriment of any *place* of *cultural significance*.¹
- 110. Consistent with Article 9 of the Burra Charter, the Commission agrees with the Heritage Council that the physical location and historic setting of the Ravensworth Homestead complex contributes to its significance.
- 111. During its meeting with the Commission on 28 March 2022, the Heritage Council stated:
 - ...as the Burra Charter says, [relocation is] the absolute last resort and the Council no way endorses either relocation option (Transcript, page 11).
- 112. Regarding the "heritage buildings" that comprise the Ravensworth Homestead complex, Heritage NSW stated:
 - ...its story is very much around place, it's around its setting, how it presents in the landscape, why it was built there (Transcript, page 12).

-

¹ The Burra Charter, The Australia ICOMOS Charter for Places of Cultural Significance, 2013 (original emphasis)

113. Further, Heritage NSW stated:

The site is a hundred per cent authentic. In terms of its integrity values its fabric as it was built, as it was used and all those connected stories [are] a hundred per cent intact where it is now (Transcript, page 13).

114. With regard to the Ravensworth Homestead complex's colonial heritage and the history of colonial settlement in the Hunter Valley, Heritage NSW stated:

The significance of Ravensworth is it is one of those two, three, four, five foundational colonial properties that were established in the Hunter. So, yes, you can say they're a part of a larger sort of process and a population and a settlement and development of agriculture and all of those things but they were the instigating ones that actually led through government policy. So they speak to much broader heritage values than just the Hunter or just New South Wales, they tell a national story of government policy around land use, settler ownership of land, the assignment of convicts from the Commissioner Biggs' policy and Government of Brisbane and they are the absolute, you know, manifestation of that policy change which had that causal link to conflict and dispossession.

So Ravensworth is up there with the top one, two or three of those properties in the state and, therefore, in the country and in my mind we deal with the convict sites serialists in world heritage convict sites.'(Transcript, page 9).

115. Further, Heritage NSW stated:

...we acknowledge that, you know, one of the significant values of [the] homestead was that it was a large land allocation and an accumulated one and absolutely the Ravensworth Estate in its fullest extent in the Hunter was absolutely one of the largest, that's why, you know, there's an intangible value in terms of what that homestead meant in terms of that convict assignment process and the dispossession and conflict conversation (Transcript, page 10).

- 116. The Commission has also given consideration to relevant strategic plans, including: the Regional Plan, which identifies the importance of cultural heritage and sets objectives to "identify and protect the region's heritage" (Direction 19); and the Singleton LSPS, which includes the Planning Priority of ensuring "the significance of heritage and cultural identity is embraced" (Planning Priority 2.2).
- 117. Based on the Material before the Commission, including the views of Applicant and its heritage consultants, the Department, Heritage NSW and the Heritage Council, the Commission finds that the Ravensworth Homestead complex in its existing historic location and setting has high to exceptional heritage value.

Mine Plan Options

- 118. The Applicant explored various alternative mine plan options that would retain the Ravensworth Homestead complex in situ. The EIS describes that stand-off options were considered, including mining up to 100 metres of the Homestead ('Option 6'), or mining up to 500 metres or 900 metres of the Homestead ('Option 7'). Underground resource extraction was also considered ('Option 8').
- 119. During its meeting with the Commission on 10 March 2022, the Applicant stated that all of the alternative mine plan options that would retain the Ravensworth Homestead complex in situ were found to be "not economically viable" (Transcript, page 6).
- 120. The Commission sought clarification from the Applicant (letter dated 11 March 2022) about the commercial considerations for each of the mine plan options identified, and why the options that involve leaving the Ravensworth Homestead complex in situ are prohibitive.

- 121. In its response to the Commission (letter dated 23 March 2022), the Applicant stated that mining up to 100 metres of the Ravensworth Homestead complex (Option 6) is unfeasible due to geotechnical and blasting impacts that could damage the Homestead (page 2). Option 7 (mining up to 500m of the Homestead) would restrict the mining footprint and sterilize approximately 60 per cent of the total resource (page 4) and would pose a significant financial risk to the Applicant that makes the project economically unviable (page 5). The Applicant has also discounted underground mining (Option 8) because of the unfavourable geology, a significant reduction in recovery of the available resource and the high capital costs involved (Department's AR, table 3).
- 122. The Applicant concluded "the different mine plan options (including Option 7) considered by Glencore to avoid relocation of the Ravensworth Homestead do not result in an economically viable Project" and "Glencore does not consider Option 7 to be feasible and would not proceed with the Project if an approval for a restricted mining footprint was granted" (page 5).
- 123. The Department's independent mine planning consultant, Minecraft, assessed these options, including total coal recovery and changes in project economics, including income to the state of NSW (AR para 205). Minecraft advised that Option 6 would likely result in blast-related damage to Ravensworth Homestead and long term highwall instability issues and is therefore not viable (AR para 206). It advised that Option 7 would address most of the blast-related and amenity impacts on the Homestead, however it "would not be reasonable or feasible" from an economic perspective as it would reduce Net Present Value (NPV) of the Application by some \$606 million (AR para 207). Minecraft advised that Option 8 would also not be feasible due to the complex nature of the Site's geology and high capital costs of underground mining (AR para 208).
- 124. The Department, based on advice from Minecraft, accepts that the options to retain the Ravensworth Homestead complex in-situ "would essentially render the Project unviable, and would mean that it would not proceed in any form" (AR para 211). The Department therefore recommends that if the Commission determines to approve the Application, the Ravensworth Homestead complex should be relocated and the archaeological resource comprehensively researched and salvaged to mitigate heritage impacts (AR para 215).
- 125. In its assessment of the Application, the Department considered the option to recommend refusal of the Application to the Commission on heritage grounds. The Department, in the Executive Summary of its AR, states:

Ultimately, the Department considers that there are no reasonable alternative mine plan designs available, and the only option that would leave the Ravensworth Homestead insitu would be to refuse the Project in its entirety.

The Department has carefully considered the option of recommending refusing the Project and the associated implications of such a decision. The benefits of refusing the project would include preserving the heritage values that would otherwise be reduced through the relocation process, and avoiding any impacts associated with the realignment of Yorks Creek and relocation of Hebden Road. However, importantly, all socio-economic benefits associated with the Project would be lost.

126. Given the above, the Commission accepts the views of the Applicant, the Department and its independent expert that any mine plan option that leaves the Ravensworth Homestead complex in situ would "not result in an economically viable project" (Applicant's response to the Commission, 23 March 2022, page 5).

Relocation Options

127. The Applicant proposes to relocate the Ravensworth Homestead complex to allow for the expansion of the mine (AR para 193).

- 128. The Applicant acknowledges that any relocation option would have a significant impact on the heritage values of the Ravensworth Homestead complex but considers that the loss of archaeological resource can be mitigated through archaeological salvage excavation and the adaptive re-use of the relocated structures (AR para 197).
- 129. The two proposed relocation options include the:
 - Ravensworth Farm Option, which involves moving the homestead and outbuildings via an intact move method to a site within the original Ravensworth Estate on Glencore-owned land, approximately 1.7 kilometres from the existing location (AR para 224). The Applicant considers that this option would maintain the authenticity of the homestead and its outbuildings by replicating the features of the existing site, including the approach direction, landforms and visual catchment. This option would replicate the current configuration of the buildings and surrounding landscaping (AR para 225); and
 - Broke Village Option, which involves dismantling and rebuilding the homestead and outbuildings at McNamara Park (Crown land), near Wollombi Brook in Broke, approximately 38 kilometres from the existing homestead location. This option seeks to maximise community benefit by rebuilding the homestead buildings to form a village square (AR para 230). The relocated buildings would be arranged similar to their current configuration, however the alignment and spacing of the buildings would be changed to allow for its intended multipurpose cultural and tourism use (AR para 231). This option was originally proposed by members of the Broke-Fordwich community (AR para 229).
- 130. The Commission met with representatives of the Broke Village Square Trust (**BVST**), a community group advocating for the Broke Village Option, on 8 March 2022 and heard its submission during the Public Hearing. The BVST believe that relocation of the Homestead and outbuildings to Broke to create a new village square would create a positive social and economic outcome for the local area with no additional cost to government. Written submissions received by the Commission from the BVST included planning and architectural advice and an economic impact assessment supporting the proposed relocation.
- 131. The Commission notes that Council supports the Broke Village Option. The Commission heard Council's statement at the Public Hearing that Council considered a motion in respect to the relocation of the Homestead at its meeting on 15 March 2022. At that meeting, Council unanimously agreed to support the proposal to relocate the Ravensworth Homestead complex to McNamara Park in Broke (Transcript, page 32).
- 132. The Commission notes that the town of Broke was subject to a major flood event in July 2022 during which McNamara Park the proposed location of the Broke Village Option was inundated by flood waters from the Wollombi Brook.
- 133. The Department acknowledges that "any proposal to relocate the homestead complex would have a high heritage impact, in that it would remove the buildings from their historic location and setting" (AR para 195). The Department acknowledges the Burra Charter in this regard, which states that "relocation is generally unacceptable unless this is the sole practical means of its survival" (AR para 196).
- 134. The Department is of the view that both relocation options have merit and that both are feasible. It considers the Ravensworth Farm Option preferable from a heritage perspective because it "retains more of the heritage values", however it considers that the Broke Village Option has "greater public benefit in terms of facilitating public access and ongoing engagement and use (AR para 244)".

- 135. The Department sought advice from heritage expert, Hector Abrahams Architects, to identify what, if any, heritage value can be retained should the relocation be approved. Hector Abrahams Architects considers that the relocation of the Ravensworth Homestead complex, although reducing the heritage significance of the Site, would allow for the retention of many aspects of its heritage value. The advice concluded that the Ravensworth Farm Option "preserves many more aspects of significance than the rebuilding at Broke" (AR para 245).
- 136. In its submission to the EIS (dated 11 February 2020), the Heritage Council stated that it does not support any relocation of the Ravensworth Homestead complex. The Heritage Council is of the view that:

The proposed relocation of Ravensworth Homestead will result in the irreversible loss of its identified high and exceptional significance in the form of its intact fabric, setting, views and meaning. The cultural landscape which reinforces the Complex's state significance including in-situ archaeology, Aboriginal intangible cultural values and cultural landscape plantings will be lost. The proposed relocation options also have potential to result in loss and major damage to the significant fabric of Ravensworth Homestead (page 2).

137. The Commission heard the views of the Heritage Council and Heritage NSW during its meeting with the Commission and the Department on 28 March 2022. The Heritage Council stated:

Our view is that either relocation would diminish its significance so much that it would be highly unlikely to meet the threshold for state listing. It may meet the threshold for local listing. In the nearby move within Broke, I doubt that it would even meet that because just too much of its key elements of significance either diminished or eliminated (transcript, page 14).

- 138. To the extent that the Heritage Council and Heritage NSW submitted that an intact move of elements of the Ravensworth Homestead complex would be technically unfeasible, the Commission does not accept that submission. The feasibility of an intact move is a matter for expert opinion and the Commission is unaware of any expert evidence before it that would indicate that an intact move of structures forming part of the Ravensworth Homestead complex would not be technically feasible for any reason.
- 139. Based on the Commission's finding at paragraph 107 that that the Ravensworth Homestead complex in its existing historic location and setting has high to exceptional heritage value, the Commission agrees with the views of the Heritage Council and Heritage NSW and finds that the heritage impacts of the proposed relocation of the Ravensworth Homestead complex are significant and irreversible.
- 140. In forming its view, the Commission has considered the ESD principle of intergenerational equity, as required under the EP&A Act. The Commission finds that removing the Homestead would sever a significant tangible connection to the past which would have long-term detrimental impacts for future generations. The Commission finds the present generation should ensure that the heritage value of the Site is maintained or enhanced for the benefit of future generations.

Aboriginal Heritage Significance

141. The Applicant's EIS includes an Aboriginal Cultural Heritage Assessment (**ACHA**) and an Aboriginal Archaeology Impact Assessment (**AAIA**). The Commission understands that the assessments were prepared in consultation with Aboriginal stakeholders, including 32 Registered Aboriginal Parties (**RAPs**). Detailed consultation was undertaken with RAPs that identify as Wonnarua people, including representatives of the PCWP and the WNAC (AR para 263).

- 142. Heritage NSW is satisfied that the Applicant's ACHA and AAIA were undertaken in accordance with relevant Aboriginal heritage assessment and consultation guidelines (AR para 264).
- 143. The assessments identified a total of 91 Aboriginal sites within or close to the disturbance area of the Application, comprised of 36 isolated finds and 55 artefact scatters (AR para 265 and 266). Of these sites, the majority (77) were assessed as having low scientific significance, and no sites have been assessed as having high scientific significance (EIS, Executive Summary).
- 144. The Commission individually met with representatives of PCWP and WNAC on 8 March 2022. In addition, the Commission heard submissions from representatives of PCWP at the Public Hearing and from community members who raised concerns about the Application's impacts on Aboriginal heritage.
- 145. The Commission acknowledges that some stakeholders believe that the Ravensworth Estate may have been the site of frontier violence, conflicts and/or a massacre of Aboriginal people. The Commission heard differing views from the PCWP and WNAC in this regard during its meeting (as described below). The Commission notes the Heritage Council's view that the "the Aboriginal pre- and post-contact history of the Ravensworth Homestead is contested" (AR para 186).
- 146. The Commission acknowledges the contested nature of the history of conflict at the Site among Aboriginal groups. The Commission also acknowledges that some stories and sites that may be significant to one group, may not be significant to other Aboriginal groups.
- 147. During its meeting with the PCWP on 8 March 2022, the Commission heard the views of a representative who stated:

The end result was, you know, a clash between our people and Dr Bowman. It got to a breaking point, and the result of that was, was, you know, a very well documented and recorded history of Lieutenant [Lowe] with a garrison from Newcastle, Mounted Police, Marines and, and British with posses mounting reprisals over the next ten years. It started off with small skirmishes but then it accumulated into an absolute massacre where Captain – he was then promoted I think at that stage to Captain [Lowe]. He was the first British subject to be charged by the Crown for knowingly massacring, and in his own words, massacring native prisoners at the Bowman Estate...

We also knew from Aunty Barb's line and other mobs that, you know, this area was a very nasty place, this estate... because we all know, as Aboriginal people, what happened because we all talk about it (Transcript, page 8).

148. During its meeting with the WNAC on 8 March 2022, the Commission heard the views of a representative who stated:

Now, I can tell you now that not one of our Elders have ever spoken about a massacre at that homestead, at that particular site. It might have happened around the other areas or, or whatever, but nothing that we know from oral history or unbroken knowledge of stories that have been passed down generation after generation to my people who lived on that mission ever spoke about a massacre on that homestead. And that's my part of the history and the knowledge that I've been handed down to about that homestead.

- 149. With regard to cultural sites and intangible cultural heritage, the Commission heard submissions that the Ravensworth Estate is an exceptionally intact cultural landscape that tells the story of shared Aboriginal and historic heritage in the region. The Commission also heard that the landscape is the last intact landscape of Wonnarua country.
- 150. During its meeting with the Commission on 8 March 2022, a representative of PCWP stated:

- "...the actual mapped land which is Wonnarua, which means hills and plains, because that's what it means, is the only intact undulating plains left in the Hunter Valley of what it looked like before British turned up... from an ecological/archaeological perspective, the landscape harbours a wealth of information (Transcript, page 9).
- 151. Further, regarding inter-generational equity, the PCWP representative stated:
 - So, I mean, to me, the landscape is vitally important for reconciliation and intergenerational equity for the Wonnarua People. We don't have any undulating plains with, you know, second and third storey tributaries with a first water stream like Hunter River. All the other undulating areas we have been totally destroyed by open-cut mining. I think for the state of New South Wales, the current Ravensworth Homestead is a vital window into the colonial past, the white colonial past on how big farms were run, but it also is a clear site, a hallowed site where reconciliation, for once, can be settled in the Hunter Valley (Transcript, page 14).
- 152. The Applicant, at its meeting with the Commission on 10 March 2022, described that it undertook extensive consultation with the local Aboriginal community and RAPs during the preparation of the Application. The Applicant described that consultation comprised meetings, site visits, fieldwork, viewings of archaeological investigations, and workshops facilitated by anthropologists, including "values workshops, group elder workshops and family workshops" (Transcript, page 4). RAPs were also engaged in reviewing the reports as they were prepared, including the ACHR.
- 153. The Applicant's EIS states:

The historical associations with early settlement, conflict, dispossession and survival are important, and the nature of the area as a surviving cultural landscape is of significance to numerous members of the Wonnarua people (EIS, Executive Summary).

- 154. While the Applicant acknowledges the Aboriginal significance of the Site, and the value of the cultural landscape, it is of the view that the impacts caused by the Application can be managed through mitigation measures implemented "in consultation with the RAPs and Knowledge Holders involved in the assessment" (EIS, Executive Summary).
- 155. The Department, at AR para 275, acknowledges that some Aboriginal groups identify the area as having high cultural significance, however overall, the Department considers that the disturbance area itself has relatively low tangible archaeological significance.
- 156. At AR para 274, the Department states:

The Department and Heritage NSW are satisfied that Glencore has explored and identified reasonable and feasible measures to minimise the Project's impacts on Aboriginal heritage value, and that the Project's residual impacts are unlikely to have a significant incremental or cumulative impact on the Aboriginal heritage values of the region.

- 157. The Department recommended conditions to ensure that the residual impacts of the Application are minimised as far as practicable. The Department has recommended conditions requiring the Applicant to implement an Aboriginal Cultural Heritage Management Plan in consultation with Aboriginal stakeholders, salvage Aboriginal sites within the disturbance areas and continue to involve Aboriginal stakeholders in the management of Aboriginal heritage issues on Site (AR para 276).
- 158. The Commission views the two main aspects to consider with respect to Aboriginal cultural heritage relate to whether the Site was the location of frontier violence and conflicts in the 1820s, and what Aboriginal cultural significance will be impacted by the proposed development.

- 159. In considering the matter of the massacre, the Commission accepts the finding of the Department and Heritage NSW, as stated in the Department's letter to the Commission dated 10 June 2022, that the massacre did not occur on the Ravensworth Estate (page 1). In an attached letter from Heritage NSW to the Department, dated 6 June 2022, Heritage NSW stated that the "1826 massacre occurred on properties outside of the Ravensworth Estate" and "the current homestead was built after the 1826 massacre". However, it also stated that "the current homestead is connected to the story of dispossession and displacement [of Aboriginal people] because, for example: Ravensworth was one of the earliest properties settled in the Hunter and as a result played a role in displacement of Aboriginal people in the region; [and,] Ravensworth staff were involved in the hostilities that culminated in the massacre event" (page 1).
- 160. Regarding intangible cultural significance, the Department acknowledges that some groups identify the area as having high cultural significance and identify a connection to the land (AR para 270).
- 161. The Commission notes an application has been made to the Commonwealth government under Section 10 of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Commonwealth) (**ATSIHP Act**). The Commission understands that a final decision in relation to the ATSIHP Act application has not yet been made.
- 162. Documents relating to the application under the ATSIHP Act were provided to the Commission over the course of its deliberations on the present Application. Principally, this was the report prepared for the Commonwealth Minister in June 2021 by Mr Daniel Leo for the purposes of Section 10 of the ATSIHP Act (Leo Report). Without unnecessarily detailing the complex procedural history of the Commission's consideration of the Leo Report, it is pertinent to note that:
 - the PCWP considered that the Leo Report should be given considerable and determinative weight in the Commission's consideration of the impacts of the Application on Aboriginal cultural heritage; and
 - the Applicant was of the view that the Leo Report contained material deficiencies that should preclude its consideration by the Commission in determining the Application.
- 163. At the Commonwealth government's request (reflected by a corresponding request by the Applicant), the Commission agreed on 10 October 2022 to restrict publication of the Leo Report, along with certain related submissions, correspondence and further assessment undertaken by the Department that if published could disclose the content of the documents over which the Commonwealth requested the maintenance of confidentiality.
- 164. Given the confidentiality maintained over the Leo Report and the associated documents, the Commission cannot address their content in detail in the present Statement of Reasons. It is sufficient to note that the Commission:
 - examined the Leo Report and the submissions made on it as required by law;
 - gave the Applicant, the PCWP and the Commonwealth government opportunities to make submissions on the Leo Report and its relevance to the Commission's determination of the Application;
 - sought further assessment from the Department regarding the Leo Report as it relates to the Application; and
 - did not rely on any information or opinions expressed in the Leo Report as being determinative of the present Application, or as contributing to the Commission's reasons for refusal of the present Application (except insofar as information in the Leo Report can also be found in other, publicly available materials before the Commission).

165. The Commission has considered the Aboriginal heritage significance of the Site in detail, and the potential impacts of the Application on Aboriginal cultural heritage value. The Commission acknowledges that the Wonnarua people have cultural connections to the Site and broader area, including the Ravensworth Homestead complex (noting that the degree of significance is disputed).

Commission's Findings

- 166. The Commission notes that in making its determination, it has given careful consideration to both Aboriginal heritage and historic heritage matters.
- 167. The Commission finds that the Ravensworth Homestead complex, in its existing historic location and setting, has high to exceptional heritage value.
- 168. The Commission accepts the views of the Applicant, Department and its independent expert that any mine plan option that leaves the Ravensworth Homestead complex in situ would "not result in an economically viable Project" (Applicant's response to the Commission, 23 March 2022, page 5).
- 169. The Commission finds that relocation of the Ravensworth Homestead complex would have significant and irreversible impacts on heritage.
- 170. The Commission finds that inter-generational equity should be maintained by ensuring the heritage value of the Site is maintained or enhanced for the benefit of future generations.
- 171. Given the reasons above, and despite the likely economic and other benefits that would arise from the project (see section 5.3 below) the Commission finds that the Application should be refused.
- 172. In summary, and despite taking into account the likely economic and other benefits of the project, the Commission has been presented with sufficient evidence to warrant refusal of this Application because of its significant, irreversible and unjustified impacts on the historic heritage values of the Ravensworth Homestead complex. The Commission considers impacts to historic heritage to be the primary reason for refusal of the Application.
- 173. Some local Aboriginal groups have cultural connections to the Site and broader area, including the Ravensworth Homestead complex.
- 174. The Commission considers that the Application would harm Aboriginal cultural heritage values.
- 175. The Commission considers the Aboriginal heritage associated with the Site to be contested and complex. Given the Commission's findings in relation to historic heritage that is, that sufficient evidence has been provided to the Commission such that it has determined to refuse the Application on historic heritage grounds the Commission does not consider it necessary to make further findings with regard to Aboriginal heritage matters.

5.2 Greenhouse Gas Emissions

176. The Applicant's EIS was accompanied by a Greenhouse Gas and Energy Assessment (prepared by Umwelt, dated November 2019), which included an assessment of the Application's predicted GHG emissions. The GHG emissions predicted in the EIS were based on the Method 1 assessment approach under NGERS, which uses a default factor applicable to all open cut mines in NSW, calculated based on ROM tonnes extracted.

- 177. The Applicant provided an updated Greenhouse Gas Assessment in the RtS which updated the predicted GHG emissions based on the Method 2 technique of NGERS, which is a gas domain specific estimation method and uses actual measured levels of gases within target coal seams obtained from borehole drilling to derive a site-specific estimate of fugitive emissions.
- 178. The Applicant's GHG emission prediction was further updated in a letter to the Department dated 21 January 2022, to revise the Scope 1 fugitive emissions based on a revised global warming potential of 28 (rather than 25) for methane gas. At a very basic level, the global warming potential is the calculation used to convert GHG emissions into carbon dioxide equivalent (CO₂-e) values to align with National Greenhouse and Energy Reporting (NGER) requirements.
- 179. A comparison of the Scope 1 emissions calculated in the EIS, RtS and revised in the Applicant's letter described in paragraph 178 is included at **Table 3** below.

Table 3 Comparison Scope 1 Emissions predictions (Source: Applicant's letter to the Commission dated March 2022)

	Scope 1 Emissions (MtCO ₂ -e)		
	EIS (Method 1)	RtS (Method 2)	Revised prediction (Global Warming Potential 28)
Diesel Use	2.6	2.6	2.6
Fugitive emissions	7.3	3.4	3.8
Total	9.9	6.0	6.4

180. The Department's letter to the Commission dated 30 March 2022 clarified the total estimated project GHG emissions, including updated percentage calculations. The Department's table is recreated at **Table 4** below.

Table 4 Estimated GHG Emissions from the Project (Source: Department's letter dated 30 March 2022)

GHG	Source	Estimated emissions (Mt CO ₂ -e)	% of total emissions	
Scope 1	Fugitive emissions from exposed coal seams	3.8	2.8	
-	On-site diesel consumption	2.6		
Scope 2	On-site electricity consumption	0.45	0.2	
Scope 3	Downstream burning of product coal, downstream transport and electricity	220.4	97	
	Total	227.26	100	

181. The Commission sought clarification from the Applicant about the difference between EIS and RtS GHG emissions estimates. In response, on 6 May 2022 the Applicant provided the Commission with the borehole data that informed the gas domain model used for the Method 2 calculations. The Commission considered the borehole data and is satisfied that the Method 2 calculations reasonably predict the GHG emissions expected for the Application.

182. The Commission also notes the Department sought advice from the Climate and Atmospheric Science branch within the then Environment, Energy and Science Division, which confirmed that the methodology used by the Applicant to calculate its emissions was robust (AR para 335). The Climate and Atmospheric Science branch also made recommendations about reducing diesel consumption and offsetting residual emissions.

Mitigation Measures

- 183. In its EIS, the Applicant proposes a range of Scope 1 and 2 GHG management and mitigation measures, as described at AR para 323, including:
 - limiting the length of material haulage routes, thereby minimising transport distances and fuel consumption;
 - optimising haul road ramp gradients and payload to reduce diesel use;
 - selecting equipment and vehicles that have high energy efficiency;
 - scheduling activities so that equipment and vehicle operation is optimised (e.g. minimising idle times and in-pit servicing);
 - improving extraction and processing energy use through implementation of through seam blasting;
 - energy efficiency initiatives to reduce indirect electricity consumption Scope 2 emissions:
 - implementing the existing emissions cap for the mine in accordance with the Safeguard Mechanism under the Australian national greenhouse gas mitigation policy framework; and
 - participation, monitoring and reporting within the Commonwealth Government's NGERS, which includes ongoing review of technologies and measures to further minimise GHG emissions.
- 184. During respective assessments, the Department and the Commission sought clarification from the Applicant about whether pre-draining of the coal seams could be implemented in this Application to mitigate fugitive emissions. The Applicant confirmed that pre-draining the coal seam is not practical or feasible given the structurally complex (faulted) domain, the nature of the geology (thin seams in a multi seam environment) and the low gas content over the majority of the mining area. The Department's assessment concludes the Applicant has applied reasonable and feasible measures to reduce its Scope 1 and 2 emissions through the design and operation of the Application (AR para 325).
- 185. The Department concludes that, on balance the residual impacts of the Application are acceptable. The reason for this conclusion is outlined At AR paras 340 and 341, which note the Application represents a continuation of existing mining activities, will use existing infrastructure and will result in emissions that are relatively modest for a mine of this scale.
- 186. The Department has recommended conditions to limit the emissions to the RtS predictions through Scope 1 and Scope 2 performance measures. The Department has also recommended conditions requiring new technologies and other options to further mitigate Scope 1 and Scope 2 emissions to be regularly reviewed and implemented where feasible. This review is recommended to be implemented through the preparation of an Air Quality Greenhouse Gas Management Plan in consultation with the EPA and the Department's Climate and Atmospheric Science branch. The Department has also recommended conditions to reduce Scope 2 emissions, including the use of electricity generated by renewable or carbon neutral energy sources.

Commission's Findings

- 187. The Commission notes that a number of submissions were received objecting to the proposal on the basis of GHG emissions and the cumulative impact the mine would have on climate change. The Commission acknowledges that submissions expressed that approval of the mine would be inconsistent with NSW Government emission reduction targets for 2030 and 2050.
- 188. The Commission has considered the matters in clause 2.20(1) and 2.20(2) of SEPP Resources and Energy and finds that the Application's Scope 1 and Scope 2 emissions have been estimated using the recommended methodologies consistent with current national and NSW policy settings and commitments. In the absence of any clear policy guidance on performance criteria or offsets, the Commission is of the view that the Application is not inconsistent with the CCPF, the Net Zero Plan or Australia's current obligations under the Paris Agreement in respect of Australia's current nationally determined contribution.
- 189. The Commission notes the Recommended Conditions provide mechanisms to reduce Scope 1 and 2 emissions, requiring the Applicant to investigate available technologies over the life of the Application. The Commission also notes the Recommended Conditions aim to reduce Scope 2 emissions through the implementation of renewable or carbon neutral energy sources.
- 190. The Commission accepts the Applicant's estimated GHG emissions from the Application as described at paragraphs 180.
- 191. The Commission is satisfied that the GHG related impacts of the Application were appropriately assessed and that the Department's recommended conditions in respect of GHG emissions could be reasonably capable of addressing those impacts consistent with the current legislative and policy framework. As the Commission has determined on other grounds to refuse consent to the Application, it is unnecessary for the Commission to make any more specific findings in respect of the Application's GHG emissions.

5.3 Economics

- 192. The Commission heard from speakers at the Public Hearing and received written submissions regarding the predicted economic impacts of the Application, including concerns that the predicted economic benefits may not justify other impacts of the Application. The Commission also received submissions in support of the Application which highlighted the predicted employment generation and broader economic benefits to the local area and state economies.
- 193. At the Public Hearing, the Commission heard the submission from Mr Rod Campbell on behalf of the Australia Institute who raised concerns regarding the accuracy and completeness of the economic assessments prepared on behalf of the Applicant and Department. Mr Campbell also questioned the rigour of the Department's assessment, particularly regarding the assumption that the consultant's reports represent the two extremes for NPV.
- 194. The Applicant's EIS includes an Economic Impact Assessment (**EIA**) prepared by Ernst & Young (EY), dated 29 October 2021 and prepared in accordance with the NSW *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (Economic Guidelines). The EY assessment comprises a Cost Benefit Analysis (**CBA**) and Local Effects Analysis (**LEA**). The EY report estimates a NPV for the Application of \$1,149.9 million, comprising \$398 million of direct benefits, \$754.3 million of indirect benefits, and \$2.4 million of indirect costs.

- 195. The Applicant also submitted an addendum to the economic assessment (prepared by Umwelt, dated 5 August 2021), which provided justification for the treatment of employee and supplier benefits in the EY economic assessment.
- 196. The Department commissioned the Centre for International Economics (CIE) to conduct a review, dated 30 November 2021, of the Applicant's EIA.
- 197. The Applicant submitted a response to the CIE economic review (prepared by Umwelt, dated 20 December 2021). The Commission notes EY and CIE did not reach a consensus on the assumed costs and benefits of the Application. In particular, the assessments relied on differing approaches and values for:
 - coal price forecasts;
 - GHG emissions abatement costs and apportionment;
 - · company and payroll tax benefits; and
 - benefits to workers and suppliers.
- 198. Notwithstanding the different assumptions used by both the Applicant's consultants and the CIE, both concluded that the project could reasonably be expected to deliver a net economic benefit. CIE concludes that it is reasonable to expect a NPV of \$151 million as a central estimate, compared with the EY report that estimates an NPV of \$1,149.9 million.
- 199. The Department acknowledges the difference in assumptions between CIE and the Applicant's consultants. AR para 537 states:

The Department acknowledges that cost-benefit analyses are commonly criticised, with reasonable people differing on the value that should be placed on various costs and benefits, particularly the externalities. The Department also recognises that both the assessment prepared by Glencore for the EIS, and the independent review undertaken by CIE contain relatively conservative assumptions and are likely to represent the two extremes when it comes to the realised benefit to NSW (i.e. they are likely the best and worst case scenarios).

200. The Commission notes the Department's view that it is "satisfied that the Project would have major economic benefits for the region and NSW, even following subtraction of costs for all environmental, social and economic externalities that may be associated with the Project" (AR para 555).

Commission's Findings

- 201. The Commission notes the lack of consensus on the Application's NPV and the differing assumptions in the economic assessments by the Applicant's and Department's consultants. Of particular concern is the considerable uncertainty regarding the forecast coal prices and GHG emission abatement costs and apportionment, however the Commission notes the Economic Guidelines are open to differing interpretations. The Commission agrees with the Department that the variation between the cost-benefit analyses of the Application come down to different assumptions. As a consequence, while the Commission has had regard to the opinions expressed by the consultants engaged by both the applicant and the Department for the purposes of its determination, it finds that there is uncertainty about the quantum of economic benefit associated with the project.
- 202. The Commission does accept that, if approved, the Application would enable the economic reuse of existing infrastructure and could generate net economic benefits for the local area, the Hunter region and to NSW more broadly through employment, royalties and tax revenue. Nonetheless, the possible net economic benefit does not warrant the grant of consent to the Application.

5.4 Rehabilitation and Final Landform

- 203. The EIS includes a Rehabilitation and Mine Closure Strategy (prepared by Umwelt, dated November 2019). The proposed rehabilitated emplacement area would have a height of 185m AHD, with localised areas up to 200m AHD (AR para 512). The Strategy proposes "an undulating landform generally reflecting the dominant features of the existing environment" with "natural landform design features" (page 15). It states the conceptual post mining land uses may include "native vegetation and open grassland" (page 25).
- 204. As part of its assessment, the Department engaged an independent expert to undertake a review of the feasible alternatives for the mine plan and final landform. The review concluded that the Applicant identified the feasible alternatives and its reasons for deciding on the preferred mine plan and final landform are sufficiently justified (AR para 521). The Department states that "the proposed final landform has been designed following detailed consideration of available alternatives, and that it presents an appropriate final landform and final land use" (AR para 524).
- 205. In its submission to the EIS, the Biodiversity Conservation Division (**BCD**) requested further information with respect to rehabilitation. Following its review of the RtS report, and subsequent correspondence, BCD confirmed it was satisfied by the information provided by the Applicant regarding rehabilitation (AR, Table 2).
- 206. The Commission agrees with the Department that, if it were to determine to approve the Application, mine rehabilitation could be appropriately managed.
- 207. Issues associated with rehabilitation and final landform were considered by the Commission and were not considered to be a reason for refusal of the Application.

5.5 Water Resources

208. The Site is located in the Bowmans Creek catchment, which flows into the Hunter River approximately five kilometres to the south of the Site. There are two ephemeral tributaries of Bowmans Creek located in the disturbance area – Yorks Creek in the northern part of the proposed mine extension and Swamp Creek to the south of the proposed extension area – which both drain in a south-west direction to Bowmans Creek (AR para 383).

Groundwater

- 209. The Commission notes concerns were raised in public submissions about potential adverse impacts on Bowmans Creek and associated alluvial aquifers, groundwater impacts for farming and water availability in local boreholes. At the Public Hearing, the Commission heard comments about the groundwater model prepared for the Application.
- 210. The Bowmans Creek alluvium is classified as 'highly productive' under the *NSW Aquifer Interference Policy 2012* (AIP). The alluvium associated with Yorks Creek and Swamp Creek that would be directly affected by the Application is relatively shallow and largely unsaturated because it is located above the water table. Groundwater in this alluvium is generally more saline and is not classified as highly productive (AR para 389).
- 211. The Applicant's EIS included a Groundwater Assessment (prepared by AGE, dated November 2019), which was peer reviewed by HydroAlgorithms. The EIS notes that the long history of mining in the area has significantly modified the groundwater environment in the vicinity of the Site. It states that the Application's contribution to cumulative impacts would be limited to localised areas adjacent to the Yorks Creek and Swamp Creek alluvium.

- 212. The Department sought advice from DPE Water during its assessment. DPE Water and the Department are both satisfied that the assessments undertaken have been prepared in accordance with the applicable guidelines and standards and are 'fit-for-purpose' to assess the water related impacts of the Application (AR para 380). The Department and DPE Water are satisfied that the Application is unlikely to have any significant impact on water sources, and that there is adequate depth in the water market for the Applicant to obtain the required licenses to service the project, or to satisfy the requirements through its existing entitlements (AR para 416).
- 213. The Commission agrees with the views of the Department and DPE Water that the Applicant's groundwater model is fit for the purpose of predicting groundwater impacts and that the Application would not cause drawdown that exceeds the minimum harm threshold under the AIP. If it were to determine to approve the Application, the Commission considers that groundwater impacts could be appropriately managed. As such, issues associated with groundwater impacts were not considered to be a reason for refusal of the Application.

Surface Water

- 214. The Application proposes to realign a two-kilometre section of Yorks Creek with the realigned creek proposed to re-enter Bowmans Creek approximately four kilometres upstream of the existing confluence (AR para 384). The upper reaches of Swamp Creek are proposed to be removed to facilitate the mine extension (AR para 385). The Applicant has prepared detailed concept plans for the Yorks Creek realignment, with the objective to minimise erosion risk; maintain hydrological integrity; maintain pre-existing sediment transport; and provide equivalent habitat value (AR para 398).
- 215. Both the Department and DPE Water are satisfied that the surface water impacts of the Application can be appropriately managed, subject to best practice conditions (AR para 405), including designing and constructing the diversion to agreed best practice standards.
- 216. Issues associated with surface water impacts were considered by the Commission and were not considered to be a reason for refusal of the Application.

Final Void

- 217. The Department notes that the proposed final void would be larger and deeper than the existing approved void but has been designed to minimise the contributing catchment area (AR para 420). The Department accepts that "complete backfilling of the void is not reasonable and feasible" and recommended conditions requiring the Applicant to minimise the size and catchment of the final void as far as practicable (AR para 422).
- 218. DPE Water did not raise concerns in its submissions to the Department regarding the final void.
- 219. The design of the final void was considered by the Commission and was not considered to be a reason for refusal of the Application.

5.6 Biodiversity

220. The Application proposes to clear approximately 750 hectares of land, including native vegetation, to establish the operational footprint of the mine and access the coal resource. Much of the Site has been historically cleared of vegetation – primarily for agricultural and mining land uses – and is predominantly comprised of grassland. The proposed disturbance area also comprises areas of regrowth vegetation and remnant native vegetation (AR para 429).

- 221. The Commission heard submissions from members of the public that raised concern about the proposed clearing of vegetation, including the cumulative impact of clearing fragmented remnant vegetation, and the loss of biodiversity at the Site and impact on the biodiversity values of the surrounding region.
- 222. The Applicant submitted a Biodiversity Development Assessment Report (**BDAR**) for the Application (prepared by Umwelt, dated November 2019). The Commission notes that both the Department and BCD are satisfied that the BDAR was prepared in accordance with relevant guidelines and policies and is adequate for assessing the biodiversity impacts and offsetting requirements for the Application (AR para 428).
- 223. During targeted flora and fauna surveys, the Applicant identified five 'Plant Community Types', 10 ecosystem-credit species and four species credit species within the proposed disturbance area. No threatened flora or fauna species listed under the EPBC Act were recorded (AR para 435). No threatened aquatic flora or fauna species listed under either the EPBC Act or the *Fisheries Management Act 1994* were recorded during targeted aquatic habitat assessments and qualitative sampling (AR para 438).
- 224. The Applicant, in its EIS, proposes that "all impacts to native vegetation and threatened species will be fully offset such that there is no net loss of biodiversity values". It does not expect the Application will result in any substantial indirect impacts on the terrestrial biodiversity values of surrounding lands or on aquatic or subterranean groundwater dependent ecosystems (EIS, Executive Summary).
- 225. BCD initially raised some issues regarding the assessment of biodiversity impacts and requested further information. The Applicant provided a response to BCD's requests in its RtS and BCD subsequently confirmed that its comments on biodiversity issues had been adequately addressed (AR para 427).
- 226. The Department states that it "is satisfied that Glencore has taken reasonable and feasible measures to avoid impacts to biodiversity, where practical, given the location of the coal resource" (AR para 441). The Department is satisfied that the Application's biodiversity impacts can be appropriately offset by requiring the Applicant to obtain and retire the required ecosystem and species credits in accordance with the Biodiversity Assessment Method and the Biodiversity Offsets Scheme (AR para 473).
- 227. If it were to determine to approve the Application, the Commission agrees with the Department that impacts on biodiversity values, including from direct clearing and indirect impacts, could be suitably avoided, mitigated and/or offset. As such, issues associated with biodiversity impacts were not considered to be a reason for refusal of the Application.

5.7 Social Impacts

- 228. The Commission heard comments from speakers in support of the Application at the Public Hearing and received written submissions that identified jobs, community benefits and broader economic contributions as key social benefits of the Application.
- 229. The Commission also heard from speakers at the Public Hearing and received written submissions that raised concerns about the social amenity impacts of the Application on nearby landholders and communities. Submissions identified environmental impacts such as dust, reduced air quality, blasting noise, visual impacts and odour. Other submissions noted the health impacts of the Application and impacts to residents' way of life. Impacts to heritage values were also identified as key negative social impacts.

- 230. The Applicant's EIS states that the social impacts of the Application have been minimised where possible through project design and management approaches. The EIS is accompanied by a Social Impact Assessment (SIA) (prepared by Umwelt, dated November 2019), which was prepared in accordance with the SIA Guidelines. The SIA notes that the Application is for the continuation of an existing mine and therefore the SIA engagement approach adopted builds on existing relationships and activities. The SIA states that engagement with community members included nearby landowners and local and regional stakeholders (a total of 599 stakeholders) (SIA, page 13).
- 231. The Department is of the view that the social impacts are essentially a continuation of the existing social impacts associated with the approved mine (AR para 544). The Department notes that the economic benefits of the Application are a key social benefit, including "the continuation of some 690 jobs at the Mount Owen complex until around 2045" (AR para 556).
- 232. Council raised concerns in its submissions about negative social impacts on nearby residents during mining operation and mine closure. However, during its meeting with the Commission on 8 March 2022, Council commented that its concerns regarding the social impacts of the Application, particularly the social impacts on Camberwell Village, had largely been addressed by the Department's recommended conditions of consent (Meeting Transcript, page 8).
- 233. The Commission agrees with the Department's view that the social impacts associated with the Application would generally be a continuation of the impacts associated with the existing Glendell mine. The Commission acknowledges the significant economic and employment benefits that the Application would have for the local community. The Commission has also considered the social impacts related to the Aboriginal and historic heritage matters discussed in section 5.1 above. As such, social impacts were not considered to be a reason for refusal of the Application.

5.8 Noise and Vibration

- 234. Mining activities associated with the Application have the potential to create noise impacts, including blasting, general vehicle and equipment noise, alarms, construction activities and the use of the Mount Owen rail line (AR para 343).
- 235. The Applicant's EIS includes a Noise Impact Assessment (NIA) (prepared by Umwelt, dated November 2019). The Commission notes that the Department is satisfied that the NIA was prepared in accordance with relevant guidelines and policies. The NIA was accompanied by a peer review undertaken by Wilkinson Murray (AR para 344).
- 236. The NIA predicts that the 'worst-case' noise emissions would comply with applicable noise criteria at all privately-owned receivers surrounding the Site, subject to proposed mitigation measures (AR para 353). The NIA notes that as mining progresses away from receivers to the south, including privately-owned receivers in Camberwell and Middle Falbrook, the noise levels will gradually reduce.
- 237. The Department states that probabilistic modelling indicates additional operational noise mitigation measures "would not be required for many receiver areas, but that they would be required to avoid exceedances in and around Middle Falbrook and Camberwell on some occasions, particularly during winter evenings and nights, and particularly during the early years of mining" (AR para 355).
- 238. The Commission notes the EPA did not raise any issues in relation to the NIA or the Applicant's proposed mitigation measures (AR para 346).

- 239. The Department is satisfied that operational noise emissions from the Application, including low frequency noise, can be managed to comply with applicable noise criteria and are unlikely to result in any significant impacts (AR para 359). The Department recommended conditions, including setting noise limit criteria.
- 240. The Applicant's NIA indicates that no private receivers exceed the noise trigger level because of the Application. The Department and EPA accepts this and therefore the Department has not recommended conditions relating to noise impacts under the Voluntary Land Acquisition and Mitigation Policy.
- 241. The Commission agrees with the EPA and the Department's assessment of noise and vibration impacts and is of the view that the methodology and conclusions set out in the Applicant's NIA are adequate. The Commission considers that, if it were to determine to approve the Application, noise and vibration impacts could be appropriately managed. As such, issues associated with noise and vibration impacts were not a reason for refusal of the Application.

5.9 Air Quality

- 242. The Commission received written submissions and heard concerns from speakers at the Public Hearing about the impacts of the Application on air quality, including concerns about the impacts of coal dust and prevailing winds carrying dust from the mine to the surrounding properties and locality causing amenity and health problems.
- 243. The Applicant submitted an Air Quality Impact Assessment as part of the EIS (prepared by Jacobs, dated 29 November 2019). The assessment found that potential air quality impacts could include dust from general mining activities, blasting fumes and emissions from machinery. The assessment indicated that the Application would result in similar air emissions to those of the existing Glendell mine, with impacts reducing over time as mining moves away from private sensitive receivers at Camberwell and Middle Falbrook (AR para 290). The air quality modelling found that air quality generally complies with applicable criteria and there are no private sensitive receivers not already subject to acquisition rights that are predicted to experience air quality exceedances. The Applicant proposes a range of measures to further mitigate air quality impacts.
- 244. The EPA sought information regarding the Applicant's air quality modelling methods and proposed mitigation measures. Following provision of additional information on these matters from the Applicant, both the EPA and the Department were satisfied that the Air Quality Impact Assessment appropriately assessed the potential air quality impacts associated with the Application (AR para 281).
- 245. The Commission agrees with the EPA and the Department's assessment of air quality impacts and is of the view that the methodology and conclusions set out in the Applicant's Air Quality Assessment are adequate. The Commission considers that, if it were to determine to approve the Application, air quality impacts could be appropriately managed. As such, issues associated with air quality impacts are not a reason for refusal of the Application.

5.10 Visual Amenity

246. The Site is located in an intensive mining area surrounded by historic and existing mining and industrial operations. The key visual impact associated with the Application would be an increase in the overburden emplacement height, from 160m to 185m AHD (AR Table 12). The Department considers that the main affected visual receivers would be commuters on the realigned section of Hebden Road, and to a lesser extent, on the New England Highway to the west of the mine.

- 247. The Applicant proposes a range of measures to mitigate the visual impacts associated with the Application, including the construction of visual bunds and vegetation corridors and the minimisation of light spill at night, in accordance with appliable standards.
- 248. The Department is of the view that the visual impacts associated with the Application would be generally consistent with the existing visual landscape and would not significantly impact sensitive receivers. The Department is satisfied that the Applicant's proposed mitigation measures would reduce visual impacts from Hebden Road to an acceptable level.
- 249. The Commission agrees with the Department that the visual impacts of the Application are low, particularly given that the Application is for the continuation of the existing mine and there are no sensitive receivers located in close proximity to the Site. If it had determined to approve the Application, the Commission agrees with the Department that visual impacts could be appropriately managed.

5.11 Traffic and Transport

- 250. All ROM coal extracted from the Glendell mine is currently transported via internal haul roads to the Mount Owen CHPP for processing, and this arrangement is proposed to continue under the Application. Product coal processed at the CHPP would continue to be transported by rail via the Mount Owen Rail Loop to the Port of Newcastle for export, or by conveyor to the Bayswater and/or Liddell Power Stations (AR para 482), while they remain operational.
- 251. Vehicle access to the Site is via Hebden Road, a local road located to the west of the Mount Owen complex, which connects to the New England Highway.
- 252. The Applicant's traffic modelling indicates that both construction and operational traffic would be adequately accommodated on the road network, with intersections predicted to operate at a Level of Service (LoS) of A, the top performance level indicating free flowing traffic conditions (AR para 489).
- 253. Transport for NSW did not raise concerns regarding traffic or road safety impacts caused by the Application, and the Department is satisfied that the Application is unlikely to result in any significant traffic impacts (AR para 493).
- 254. The Commission agrees with the Department that, if it were to determine to approve the Application, the proposed construction and operational traffic volumes could be adequately accommodated on the road network and traffic impacts could be appropriately managed. As such, issues associated traffic and transport were not considered to be a reason for refusal of the Application.

Realignment of Hebden Road

- 255. The Application proposes to extend the open cut mine pit through an area occupied by a 5.3-kilometre portion of Hebden Road. It therefore proposes to realign that portion of Hebden Road around the western boundary of the Site (AR para 494). A dual-lane bridge over the proposed Yorks Creek realignment would also be constructed as part of the new road. The realigned section of the road is proposed to be fully constructed prior to decommissioning the existing portion of the road, and construction is anticipated to be completed by the second year of the project (AR para 497).
- 256. At its meeting with the Commission on 8 March 2022 and in its submissions, Council raised concerns regarding the proposed realignment of Hebden Road. Council's key concerns relate to the Applicant's acquisition of the existing Hebden Road corridor and the ongoing maintenance of the new road.

257. The Commission considered the realignment of Hebden Road in detail, including Council's concerns and the views of the Applicant. Given the Commission's determination to refuse the Application, it has not made findings in relation to the realignment of Hebden Road.

5.12 Voluntary Planning Agreement

- 258. The Applicant and Council had several discussions regarding a Voluntary Planning Agreement, however, there has been no resolution of negotiations. The Applicant's original offer of \$2.24 million (made in June 2020) was rejected by Council due to a disagreement around the Applicant's calculation of the project's Capital Investment Value. Council considers that the offer should be in the order of \$5.15 million (AR para 549). The Applicant is of the view that the project is a continuation of existing operations and would have little to no impact on current and planned infrastructure costs for Council (AR para 550).
- 259. The Commission heard the views of Council and the Applicant during stakeholder meetings and considered each perspective in detail. Given the Commission's determination to refuse the Application, it has not made findings in relation to a Voluntary Planning Agreement.

6 CONCLUSION: THE COMMISSION'S FINDINGS AND DETERMINATION

- 261. The Commission has carefully considered the Material before it as described in section 3.1 of this Statement of Reasons. In addition, the views of the community were expressed through public submissions and comments received (as part of the Department's exhibition and as part of the Commission's determination process), as well as in oral presentations to the Commission at the Public Hearing. The Commission carefully considered all of these views as part of making its decision.
- 262. Based on its consideration of the Material and the public submissions, the Commission finds that the Application should be refused for the reasons set out in this Statement of Reasons, as summarised below:

a) Historic Heritage

- The Ravensworth Homestead complex has local and State heritage significance, with elements of high to exceptional significance:
 - the Ravensworth Homestead complex and its setting is one of the most unique and intact of the Hunter Valley Homesteads (paragraph 102) and the Department "acknowledges that the Ravensworth Homestead and the surrounding core estate lands and Ravensworth Estate have local and State heritage significance, with elements of high to exceptional significance" (AR para 255);
 - the Department states that the Ravensworth Homestead complex has been recommended for nomination on the State Heritage Register by the Heritage Council, but the statutory process for listing, as per section 33 of the Heritage Act 1977, has not commenced (paragraph 105);
 - NSW Heritage Office's Assessing Heritage Significance includes seven criteria for assessment, with only one criterion being required to determine that something is significant enough for listing. The Ravensworth Homestead complex appears to meet all seven criteria (paragraph 107);
- The removal and relocation of the Ravensworth Homestead complex is not justified:
 - Heritage NSW notes that relocation would threaten the authenticity of the Ravensworth Homestead complex (paragraph 102);
 - the Commission agrees with Heritage NSW that the value of the Homestead "is very much around place, it's around its setting, how it presents in the landscape, why it was built there" (paragraph 112). Thus, the Commission must consider the whole setting, not just its buildings;
 - consistent with Burra Charter Article 9, the Commission finds that relocation or destruction of the Ravensworth Homestead complex is unacceptable;
- Retention of the Ravensworth Homestead complex would render the entire project economically unviable and the Applicant would not proceed with the project if approval for a restricted mining footprint was granted with a stand-off distance from the Ravensworth Homestead complex:
 - the Department and Applicant agree that retaining the Ravensworth Homestead complex in situ would make the project economically unviable;
 - the Applicant has stated it would not proceed with the project if an approval for a restricted mining footprint was granted that required a stand-off distance from the Homestead (as mentioned in the Applicant's meeting with the Commission on 10 March 2022 and in correspondence from the Applicant dated 23 March 2022) (paragraph 122);

- the Commission disagrees with the Department's conclusion that, despite the heritage impacts, the relocation of the Ravensworth Homestead complex is a justified option.
- the Commission has given careful consideration to the likely impacts of the development and the suitability of the Site, and has weighed these with the likely benefits of the project, and is satisfied that the Site is not suitable for the proposed development;
- the Heritage Council has indicated that, if the Application were refused by the Commission, it "will proceed with a nomination to recommend the listing of Ravensworth" (paragraph 106);
- the Commission could not impose conditions that in its view would appropriately manage the heritage impacts of the Application;
- in the absence of any viable alternatives to retain the Ravensworth
 Homestead complex in situ, and when considered in respect of the relevant
 Objects of the EP&A Act and principles of ecologically sustainable
 development, the heritage impacts associated with the project could not
 appropriately managed and the application must be refused;

b) Aboriginal Heritage

- the Wonnarua people have cultural connections to the Site and broader area, including the Ravensworth Homestead complex (noting that the degree of significance is disputed);
- the Commission considers that the Application would harm Aboriginal cultural heritage values;
- the Commission considers the Aboriginal heritage of the Site to be complex. Given the Commission's findings in relation to historic heritage – that is, that sufficient evidence has been provided to the Commission such that it has determined to refuse the Application on historic heritage grounds – the Commission has not made an additional determinative finding with regard to Aboriginal heritage matters;

c) Objects and Public Interest

- the precautionary principle was considered by the Commission and was not considered to be a reason for refusal of the Application;
- in relation to inter-generational equity, the Commission finds that the removal of the Ravensworth Homestead complex and associated heritage from the Site would constitute a significant loss to future generations, and therefore the Application is not consistent with the principle of inter-generational equity;
- impacts to biological diversity and ecological integrity were considered by the Commission and were not considered to be a reason for refusal of the Application;
- improved valuation, pricing and incentive mechanisms were considered by the Commission and were not considered to be a reason for refusal of the Application;
- the Commission finds that the Application, if approved, would not achieve an
 appropriate balance between relevant environmental, economic and social
 considerations, and therefore the Application is not consistent with the
 principles of ESD, Objects of the EP&A Act and is not in the public interest;
 and
- when considered in respect of the relevant Objects of the EP&A Act, and ESD principles, the impacts associated with the Application are not appropriately manageable. The risk of adverse impacts to the Ravensworth Homestead

complex and its associated heritage values are high and likely to be irreversible. The likely impacts of the Application, notwithstanding the likely benefits, warrant the conclusion that refusal of the Application is in the public interest.

263. The reasons for the decision are given in this Statement of Reasons for Decision dated 28 October 2022.

Dianne Leeson (Chair)
Member of the Commission

Snow BarlowMember of the Commission

Adrian Pilton

Member of the Commission

APPENDIX A – KEY COMPONENTS OF THE APPLICATION

 Table 5
 Key components of the Application (source: Department's AR)

Component	Approved under DA 80/952	Application
Life of mine	Approved until 30 June 2024	Additional 21 years of mining operations under SSD 9349 until 31 December 2044, followed by an additional year of coal processing at the Mount Owen CHPP (i.e. extension of SSD 5850 until 2045)
Mining areas	Open cut mining operations in the Glendell Pit	Extension of the Glendell Pit, continuing northward beyond the current pit boundary – additional 750 ha of disturbance
Extraction rates	Maximum extraction rate of up to 4.5 Mtpa	Maximum extraction rate of up to 10 Mtpa (coinciding with decrease in extraction at Mount Owen and Ravensworth)
Mining methods	Open cut mining using a truck and excavator fleet	Open cut mining using a truck and excavator fleet
Overburden emplacement and waste management	 In-pit emplacement in Glendell emplacement area to approximately 160 mAHD. Emplacement at Ravensworth East emplacement area to approximately 160 mAHD Emplacement of coarse rejects in the Bayswater North Pit and North Pit 	 In-pit emplacement within Glendell emplacement area to approximately 200 mAHD Emplacement at existing Ravensworth East emplacement area to approximately 185 mAHD Ongoing use of Bayswater North Pit and North Pit for emplacement of coarse rejects
Coal processing	 No coal processing at Glendell. ROM coal transported to Mount Owen CHPP for processing Use of CHPP and associated coal handling facilities to end of 2037 	 All coal would continue to be processed using the existing Mount Owen CHPP facilities Extended duration of use of CHPP and associated coal handling facilities to end of 2045
Transport	Transport of coal via the Mount Owen CHPP in accordance with the Mount Owen consent (SSD 5850) to end of 2037	Continued transport of coal via the Mount Owen CHPP in accordance with the Mount Owen consent (SSD 5850) to the end of 2045
Operating hours	24 hours a day, 7 days a week	24 hours a day, 7 days a week
Water Management	 Mine water management system involving dams and pipelines Raw water obtained under licences from Glennies Creek Managed as an integrated 	 Mine water management system involving dams and pipelines Raw water obtained under licences from Glennies Creek Managed as an integrated

,		
	component of the Mount Owen complex water management system (WMS) and Greater Ravensworth Area Water and Tailings Scheme (GRAWTS) under the Mount Owen consent	component of the Mount Owen complex water management system (WMS) and Greater Ravensworth Area Water and Tailings Scheme (GRAWTS) under the Mount Owen consent Realignment of Yorks Creek
	 Mine infrastructure includes: stockpiles administration and amenities buildings heavy and light vehicle access roads workshops conveyor, pipelines and power systems 	 Use of existing Glendell mine infrastructure area (MIA) until decommissioned Construction of the new Glendell MIA including heavy and light vehicle access roads Realignment of Hebden Road Telecommunications and electricity infrastructure to be re-routed Removal of Ravensworth East conveyor and associated infrastructure
	Approximately 300 full time equivalent employees	Approximately 690 full time equivalent employees. The increase in employee numbers at Glendell would coincide with the decrease in production and workforce numbers at the Mount Owen North Pit (i.e. no increase in overall workforce numbers at the Mount Owen complex)
	 Mine access via Hebden Road Access to the Mount Owen MIA and CHPP via the Mount Owen access road 	 Access to the Glendell Pit Extension via a new mine access road linking the new MIA and the proposed realigned Hebden Road Continued access to the Mount Owen MIA and CHPP via the existing Mount Owen access road
final landform	 Progressive rehabilitation of the disturbance area including establishment of native woodland and grassland Final land uses would involve a mix of agriculture and 	 Progressive rehabilitation of the disturbance area including establishment of native woodland and grassland Final land uses would involve a mix of agriculture and
	biodiversity conservation Glendell Pit final void	mix of agriculture and biodiversity conservation No additional mining voids are proposed