

Ashton Coal Project Modification 11 and Ravensworth Underground Mine Modification 10 –Integration of Mining

DA 309-11-2001-i MOD 11 and DA 104/96 MOD 10

June 2022



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Executive Summary

The Ashton Mine Complex and Ravensworth Mine Complex are neighbouring open cut and underground operations that share a common lease boundary and are approved to extract coal from similar coal seams. Both complexes are located within the Singleton Local Government Area.

Ashton Coal Operations Pty Limited (ACOL) operates the Ashton Coal Project and is a wholly owned subsidiary of Yancoal Australia. The Ravensworth Underground Mine is part of the larger Ravensworth Complex and is owned and operated by Resource Pacific Pty Limited and managed by Glencore Coal Assets Australia Pty Limited (Glencore). The approved Ravensworth Underground Mine has been in care and maintenance since 2014 and only 21.3 million tonnes (Mt) of coal from a total resource of 114.4 Mt approved to be extracted under its development consent has been mined to date.

On 9 November 2021, ACOL and Glencore submitted modification applications under the *Environmental Planning & Assessment Act* 1979 to allow ACOL to recover around 19.4 Mt of the remaining 93.1 Mt of coal from the Ravensworth Underground Mine and process the coal at the Ashton Coal pit top area. The modifications also request an 11-year extension (from 2024 to 2035) to both mining operations to facilitate the coal extraction. The modifications would not result in any changes to the extraction or processing rates, operating hours, workforce, surface infrastructure, disturbance footprint or transport methods.

The modification applications were publicly exhibited for 2 weeks and the Department received three public submissions, one supporting the modifications and two objecting on the basis of impacts to climate change and greenhouse gas emissions. The Department also received advice from key NSW government agencies and Singleton Council did not raise any concerns or object to the modification.

The Department considers that the modification applications would not result in any significant environmental impacts beyond those currently approved, noting the significant reduction in coal to be extracted and that the underground extraction footprint is reduced compared to the approved footprint. However, the Department acknowledges that the modifications would extend the mine life for both operations by a further 11 years, noting also that the approval for Yancoal's South Eastern Open Cut Extension has now lapsed, which if commenced would have extended Ashton Mine operations for a further 12 years.

The Department considers that the modification would significantly reduce the already approved greenhouse gas emissions associated with the Ravensworth Underground Mine and the Department has included conditions to restrict ongoing mining to only that proposed in the modification applications. The conditions also require that all reasonable and feasible measures be implemented to minimise GHG emissions and to prepare and implement Air Quality and Greenhouse Gas Management plans.

The proposed modifications would allow for the efficient recovery of resources already approved for extraction, provide continuing employment of around 250 workers at the Ashton Mine and realise around \$120 million in royalties to the NSW Government. Consequently, the Department considers that the proposed modifications should be approved, subject to conditions.

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1 Introduction

1.1 Background

The Ashton Mine Complex and Ravensworth Mine Complex are neighbouring open cut and underground coal mining operations that share a common lease boundary, approved to extract coal from similar coal seams and are separated by only 45 metres at their closest point. Both complexes are located within the Singleton local government area, New South Wales (NSW) (see **Figure 1**).

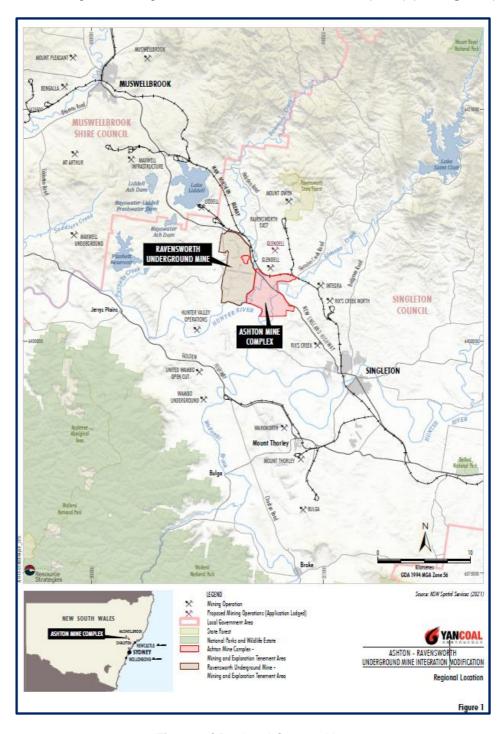


Figure 1 | Regional Context Map

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Ashton Coal Operations Pty Limited (ACOL) operates the Ashton Coal Project and is a subsidiary of Yancoal Australia (Yancoal). The Ravensworth Underground Mine is part of the larger Ravensworth Complex and is owned and operated by Resource Pacific Pty Limited and managed by Glencore Coal Assets Australia Pty Limited (Glencore).

1.2 Approval history

The Ashton Coal Project is approved to operate under DA 309-11-2001-i which encompasses the Ashton Underground Mine (Ashton Underground), the completed North East Open Cut and associated coal handling and processing infrastructure. The Ashton Coal Project is approved to extract up to 5.45 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal until 26 February 2024.

Approval was also granted for the Ashton South East Open Cut (SEOC - PA 08_0182) which would form the Ashton Coal Complex. However, this project was not commenced by Yancoal with the approval lapsing on 17 April 2022.

The Ravensworth Mine Complex consists of the Ravensworth Operations Project, operating under PA 09_0176 (not part of this modification) and the Ravensworth Underground Mine that is approved under DA 104/96.

The approved Ravensworth Underground Mine has been in care and maintenance since 2014 with only 21.3 million tonnes (Mt) of coal from a total resource of 114.4 Mt approved to be extracted under its development consent mined to date.

The Ravensworth Underground Mine is approved to extract up to 7 Mtpa of run of mine (ROM) coal until 31 July 2024.

2 Proposed modifications

On 9 November 2021, ACOL and Glencore submitted modification applications under section 4.55(2) of the *Environmental Planning & Assessment Act 1979* (EP&A Act) which seek to allow ACOL to access some of the approved, unmined coal resource remaining at the Ravensworth Underground Mine. The modification applications involve the following (see **Figure 2**):

- connection via non-subsiding first workings of the two underground mines;
- minor narrowing and shortening of some of the approved longwalls;
- transfer of ROM coal from the Ravensworth Underground Mine to the Ashton Coal Project surface facilities including transport, processing and disposal of coarse rejects and tailings;
- allowing transfer of water and gas from the Ravensworth Underground Mine to the Ashton Coal
 Project by utilising existing management systems and infrastructure;
- minor safety related adjustments to gas and ventilation management infrastructure at the ACOL-operated portion of the Ravensworth Underground Mine;
- extending mining operations for both operations to December 2035; and
- administrative changes to allow integrated management of the ACOL-operated portion of the Ravensworth Underground Mine with the Ashton Coal Project.

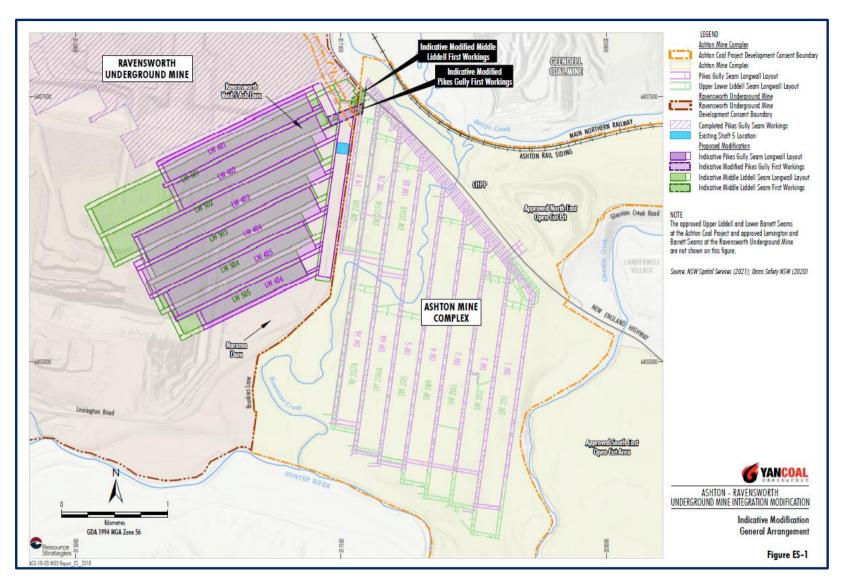


Figure 2 | Proposed Modification

The proposed modifications would not result in any changes to the extraction or processing rates, operating hours, workforce, surface infrastructure, disturbance footprint or transport methods.

The final landform for the North East Open Cut void would differ slightly when compared to the currently approved final landform, however, would remain below the current elevation of the North East Open Cut waste rock emplacement.

Detailed descriptions of the modifications are provided in the modification reports that accompanied the applications (see **Appendix A1**).

3 Statutory context

3.1 Scope of modifications

Under section 4.55(2)(a) of the EP&A Act, DA 309-11-2001-i and DA 104/96 cannot be modified unless the consent authority is satisfied that the modified proposals are substantially the same as the development for which consent was originally granted.

The proposed modifications would allow ACOL to extract some of the coal resource currently approved for extraction at Ravensworth Underground Mine under DA 104/96. However, as stated in **Section 2**, the key aspects of each development would remain unchanged, including extraction and processing rates, operating hours, workforce, surface infrastructure, disturbance footprint or transport methods.

As indicated above the operating life for mining for both mines would be extended for a further approximate 11 years, noting also that the mine life of the Ashton Mine Complex would have been extended for a further 12 years if the SEOC was progressed – noting the lapsing of the approval.

Consequently, the Department considers that the modifications are within the scope of section 4.55(2) and may be determined accordingly.

3.2 Consent authority

The Minister for Planning is the consent authority for the applications. However, the Director, Resource Assessments may determine the applications under the Minister's delegations of 9 March 2022, as there were fewer than 15 unique public objections, Singleton Council (Council) did not object to the proposed modifications, and the applicants have not disclosed any reportable political donations.

3.3 Mandatory matters for consideration

Environmental Planning Instruments

A number of environmental planning instruments¹ apply to the modifications, including:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP);
- State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (the Mining SEPP); and
- Singleton Local Environmental Plan 2013.

¹ Since the applications were lodged there has been a consolidation of SEPPs with the SRD SEPP consolidated into the Planning Systems SEPP 2021 and the Mining SEPP consolidated into the Resources and Energy SEPP 2021

The Department has considered the proposed modifications against the relevant provisions of these instruments. The Department considers that the proposed modifications can be carried out in a manner that is generally consistent with the aims, objectives and provisions of these instruments.

Objects of the EP&A Act

The consent authority must consider the objects of the EP&A Act when making decisions under the Act. The Department has assessed the proposed modifications against the current objects of the EP&A Act. The objects of most relevance to the decision on whether or not to approve the proposed modifications are found in section 1.3 of the Act. They are:

- Object 1.3(a): to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources;
- Object 1.3(b): to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;
- Object 1.3(c): to promote the orderly and economic use and development of land;
- Object 1.3(e): to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;
- Object 1.3(f): to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);
- Object 1.3(i): to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State; and
- Object 1.3(j): to provide increased opportunity for community participation in environmental planning and assessment.

The Department considers that the proposed modifications encourage the proper management and development of resources (Object 1.3(a)) and the promotion of the orderly and economic use of land (Object 1.3(c)). The modifications would allow more efficient operation and recovery of coal resource that would otherwise be left unmined as outlined in **Section 2**.

The Department has considered the principles of ecologically sustainable development (ESD, Object 1.3(b)) in its assessment of the proposed modifications. The Department considers that the proposed modifications may be carried out in a manner that is consistent with the principles of ESD. The Department's assessment has sought to integrate all significant environmental, social, and economic considerations.

The Department has carefully considered the environmental impacts of the proposed modifications, including potential impacts on the natural, cultural and built environments (Object 1.3(e) and (f)). The key findings of the Department's assessment are summarised in **Section 5**. The Department publicly exhibited the modification applications and consulted with Council (Object 1.3(i) and (j)). The outcomes of the consultation process are outlined in **Section 4**.

The reasons for granting consent for the original application

In accordance with section 4.55(3) of the EP&A Act, in determining these modifications, the Department has taken into consideration the reasons for the Minister's decisions on the Ashton Coal Project (DA 309-11-2001-i, dated 11 October 2002) and Ravensworth Underground Mine (DA 104/96, dated 20 November 1996).

In determining the original Ashton Coal Project and Ravensworth Underground Mine, the Department concluded that the benefits of the projects outweighed the impacts, subject to the adherence to strict conditions.

As stated in **Section 3.1**, the Department considers that the modified projects would be substantially the same as the development for which consents were originally granted.

4 Engagement

4.1 Department's engagement

The Department exhibited the modification applications and modification reports (**Appendix A1**) from Thursday 25 November 2021 until Wednesday 8 December 2021. The documents were made available to the public on the Department's website and exhibition notices were placed in the Singleton Argus.

Additionally, relevant public authorities (including Council) were notified of the exhibition and their advice on the application was requested.

4.2 Summary of submissions and agency advice

The Department received three public submissions in response to the exhibition of the modifications, one advocating support for the modifications and two objecting. The supporting submission cited the economic and environmental benefits of the proposed modifications, while both objections were concerned about issues relating to climate change and greenhouse gas emissions.

The Department also received advice from six NSW government agencies. An overview of the key comments made by government agencies is provided in **Table 2**.

Copies of all submissions are included in Appendix A2 and agency advice in Appendix A3.

Table 2 | Agency advice on the modifications

Agency Key Comments The Water Group The Water Group requested further information with respect to groundwater within the **Department** modelling, predicted water take post-mining, water access licences and (comprising DPE Water subsidence impacts on watercourse bank stability and riparian vegetation. and the Natural Following its review of the Submissions Report and supplementary **Resource Access** information provided, DPE Water and NRAR confirmed they were satisfied Regulator) and had no further comments. **Environment** The EPA did not object to the proposed modification and noted that both **Protection Authority** sites are subject to Environment Protection Licences (EPL) - EPL 11879 (EPA) for Ashton and EPL 2652 for Ravensworth Operations. The EPA noted that if the modifications are approved, both operations will be required to submit licence variation applications. Following its review of the Submissions Report, the EPA confirmed it was satisfied and had no further comments.

Agency	Key Comments		
Mining, Exploration and Geoscience (MEG)	 MEG did not raise any concerns regarding the modification, noting that all appropriate mining authorities to undertake extraction are currently held and that the modifications would result in numerous economic benefits. 		
Resources Regulator (RR)	 In relation to the modification to the Ravensworth consent, RR noted that the proposed modifications do not materially change the subsidence risk at either site, however raised concerns regarding the stability of the final landform at Ravensworth and potential spontaneous combustion impacts. In relation to the modification to the Ashton consent, RR stated that the Tailings Emplacement Operations Management Plan would need to be updated should approval be granted. RR also requested revised rehabilitation strategies be prepared for each mine, should the modifications be approved. Following review of the Submissions Report, RR confirmed it was satisfied and had no further comments. 		
Subsidence Advisory NSW	 Subsidence Advisory NSW did not raise any concerns relating to the modifications. 		
Dams Safety NSW	 Dams Safety NSW noted the existence of two declared dams and their notification areas above the proposed mining area, however raised no concerns regarding either proposal. 		
Council	Council did not object to the proposed modifications or raise any concerns		

4.3 Response to submissions

On 31 January 2022, ACOL and Glencore provided their Submissions Reports to address the issues raised in submissions (see **Appendix A4**). The Department accepted the Submissions Reports and made them publicly available on the Department's website.

The Department also forwarded the Submissions Reports to agencies for review and comment. These comments have been considered and addressed in **Section 5** below.

5 Assessment

In assessing the merits of the proposed modifications, the Department has considered the existing conditions of consent, the modification applications, and the applicable requirements of the EP&A Act. In accordance with section 4.55(2) and (3) of the EP&A Act, the matters for consideration set out in section 4.15(1) of the EP&A Act have been considered.

The Department considers that the key assessment issues are related to subsidence, groundwater resources, surface water resources, air quality, noise, and greenhouse gas emissions.

5.1 Subsidence

Ashton Coal Project

There are no predicted changes to subsidence impacts for the Ashton Coal Project given there is no proposed change to the underground mining area.

Ravensworth Underground Mine

The modification report for the Ravensworth Underground Mine included a subsidence review conducted by Strata Control Technology (SCT). The findings of the review indicated that some areas are expected to experience a reduced amount of subsidence, while other areas would experience an increase in vertical subsidence. However, this predicted increase is not a result of changes to the mine plan per se, rather that the subsidence modelling has been updated since the original predictions based on subsidence monitoring of extracted areas, particularly where multi seam extraction has occurred.

Overall, potential impacts to natural features are predicted to reduce given the reduced longwall footprint proposed as part of the modification (i.e. shortening and narrowing of longwall panels), while impacts in areas previously disturbed by open cut mining are likely to increase when compared to previously assessed and approved predictions. Overall, impacts on natural or built features would not increase as a result of the modification.

SCT concluded that while the magnitudes of subsidence are likely to be greater in some of the previously disturbed areas, all impacts are expected to remain consistent with the subsidence impact performance measures stipulated in DA 104/96. In addition, Glencore would continue to implement the monitoring, management and mitigation measures previously recommended for the approved Ravensworth Underground Mine.

Conclusion

Overall, the Department considers that with the proposed significant reduction in resource extraction, there would be an overall reduction in subsidence impacts compared to the approved project and that the existing conditions of consent provide a robust platform for monitoring and managing subsidence impacts. The Department notes that the Ravensworth Underground Mine includes a condition to prepare a contemporary Extraction Plan for the proposed underground extraction.

5.2 Groundwater Resources

The groundwater environment around the Ashton Underground and Ravensworth Underground Mine has been well studied and documented due to previous investigations and monitoring associated with extensive underground and open cut mining in the area. Both modification reports were accompanied by a groundwater review prepared by Australasian Groundwater and Environmental Consultants (AGE).

The groundwater review included a revision of the existing models for the Ashton Underground and Ravensworth Underground Mine to predict the likely groundwater inflows that would result from the modifications. The review also compared potential peak water take during the life of the modifications compared to the volumes previously assessed and approved along with changes in aquifer drawdown.

The groundwater review concluded that the predicted groundwater inflows associated with the modifications would be consistent with the already assessed and approved volumes. The Department notes that ACOL holds sufficient water licenses to cover the total predicted water take for the modifications (i.e., combined Ashton Underground Mine and Ravensworth Underground Mine).

The groundwater review also concluded that there would be no increase in impacts at neighbouring privately-owned bores, and while some groundwater dependent ecosystems exist along Glennies and Bowmans Creeks, the magnitude of the predicted drawdown would not increase as a result of the modifications.

Potential groundwater quality impacts were also addressed in the groundwater review. AGE concluded that the potential risk of saline groundwater impacting alluvial aquifers is very low, and that salinity of the surrounding alluvial groundwater is actually likely to decrease over time given discharge from the Permian strata to the alluvial groundwater would be reduced by increasing depressurisation of the underlying seams.

Conclusion

Overall, the Department considers that there would be no increase in impacts to groundwater resources as a result of the modifications and the existing conditions of consent provide a robust platform for monitoring and management of groundwater resources.

5.3 Surface Water Resources

Ashton Coal Project

The Ashton Underground Modification Report was accompanied by a site water balance review prepared by Hydro Engineering & Consulting (HEC). The aim of the review was to establish whether the current water demand of the Ashton Coal Project would differ from the approved operation and whether current management practices and storage infrastructure would be capable of handling additional groundwater inflows and tailings from the Ravensworth Underground Mine should the modifications be approved.

The review found that while ACOL would need to manage additional groundwater inflows from the Ravensworth Underground Mine the existing water management system has sufficient capacity to manage the additional inflows consistent with discharge requirements under its project approval and environment protection licence.

The review concluded that there would be no water supply shortfalls for operation of the coal handling infrastructure and/or dust suppression. However, it is noted in the modification report that, consistent with the approved Ashton Coal Project, there may be a need to source additional water for the underground operations to address any supply shortfalls. This would be achieved by obtaining additional Water Access Licenses, treating and/or mixing stored water, or sourcing water from adjoining mining operations.

The review also determined that current, approved water and tailings storage capacities would remain adequate, and that following review and update of the Ashton Coal Project Water Management Plan, monitoring and mitigation strategies would be sufficient to successfully manage surface water on site with no increased risk of overflow.

Ravensworth Underground Mine

As there would be minimal change to the surface water environment at the Ravensworth Underground Mine, and no predicted significant increase in subsidence impacts on surface water features, there would be only minor change in surface water impacts compared to the approved project. The conditions of the Ravensworth Underground Mine require an Extraction Plan to be prepared and implemented including a water management plan prepared in consultation with the EPA and DPE Water.

Conclusion

Overall, the Department considers that there would be no significant increase in impacts to surface water resources as a result of the modifications and the existing conditions of consent provide a robust platform for monitoring and management of surface water resources.

5.4 Air Quality

Ashton Coal Project

The modification report for the Ashton Coal Project included an Air Quality Assessment (air assessment) prepared by Todoroski Air Sciences.

The air assessment concluded that, in comparison with the approved Ashton Coal Project, the proposed modifications would not increase air quality impacts given there would be no increase in ROM coal production or processing rates. As such, the Ashton Coal Project would continue to comply with the existing air quality criteria prescribed in DA 309-11-2001-i.

The air assessment also concluded that, despite the proposed extension in mine life at the Ashton Coal Project until 2035, future cumulative air quality impacts would be significantly decreased (by up to 95%) compared to previous modelling undertaken for the Ashton Coal Complex, due to the reduction in emissions from the SEOC Project due to the lapsing of this approval.

Ravensworth Underground Mine

As the modification does not include any additional surface activities at the Ravensworth Underground Mine, and all ROM coal would now be transferred to Ashton for processing rather than processed on-site, the Department considers that there would be a decrease in air quality impacts associated with the project.

<u>Conclusio</u>n

Overall, the Department considers that there would be no significant increase in air quality impacts quality as a result of the modifications and the existing conditions of consent provide a robust platform for monitoring and management of air quality impacts.

5.5 Noise

Ashton Coal Project

The modification report for the Ashton Coal Project concluded that there would be no change to noise impacts compared to the approved project, and the Ashton Coal Project would continue to comply with the noise limits prescribed in DA 309-11-2001-i. No new infrastructure or plant is proposed in the mine infrastructure area.

Further to this, the Department considers that there would be a significant reduction in noise emissions from the Ashton Mine Complex when compared to the previously assessed and approved SEOC project, due to the lapsing of this consent. However, the Department acknowledges that the modification would extend the timeframe for operations for a further 11 years.

Ravensworth Underground Mine

A noise review was conducted for the Ravensworth Underground Mine modification in order to assess the potential impacts of operating two upcast ventilation fans, as opposed to just the one currently approved. The noise review concluded that noise levels from construction and operation of these fans would continue to comply with the noise limits prescribed in DA 104/96.

Conclusion

Overall, the Department considers that there would be no significant increase in noise impacts as a result of the modifications and the existing conditions of consent provide a robust platform for monitoring and management of noise impacts.

5.6 Greenhouse Gas

The Ashton Coal Project Modification Report included a greenhouse gas (GHG) assessment prepared by Todoroski Air Sciences.

The GHG assessment concluded that there would be a significant reduction in GHG emissions compared to the emissions from the approved Ravensworth Underground Mine, largely due to a reduction in the coal extracted and consequently not released into the atmosphere.

Based on GHG emissions intensity at the adjoining Ashton Underground mining operations targeting the same coal seams, if developed to its approved extent, the Ravensworth Underground Mine would emit approximately 29 million tonnes (Mt) of carbon dioxide equivalent (CO₂-e) of Scope 1, 2 and 3 emissions (12.4 Mt Scope 1 and 2 and 16.5 Mt Scope 3).

However, ACOL proposes to only extract 19.4 Mt of ROM coal from an approved remaining resource of 93 Mt from the Ravensworth Underground Mine workings, emitting an approximate 6 Mt CO₂-e (2.6 Mt Scope 1 and 2 and 3.4 Mt Scope 3 emissions). This represents an 80% reduction in GHG emissions compared to the approved Ravensworth Underground Mine plan.

The Department notes that mining operations in the Ravensworth Underground Mine is only permitted until 31 July 2024. To be consistent with the GHG assessment about the benefit of reduction in GHG emissions compared to the approved project, the Department has recommended a condition that mining operations cease by 31 July 2024, except for mining operations as proposed in the Ravensworth Underground Mine Modification 10 report – that is the extraction of 19.4 Mt of ROM coal, which would be permitted until 31 December 2032.

Further, the Department notes that with the lapsing of the SEOC consent, the estimated 35.1 Mt CO₂-e of GHG emissions would no longer be released. However, the Department acknowledges that the modification would facilitate the extraction of coal that would otherwise likely not be mined by Glencore.

GHG mitigation and reporting

Both consents already include requirements to implement all reasonable and feasible measures to minimise GHG emissions and to prepare and implement Air Quality and Greenhouse Gas Management plans. ACOL has committed to capture and flare gas from the Ashton Underground Mine in its central flaring plant, including from pre-drainage and goaf gas where methane concentrations are at levels that can facilitate flaring.

The existing conditions for the two approvals require these management plans to be revised within 3 months of any modification. ACOL has also committed that it would consolidate the management of greenhouse gas emissions from the Ravensworth Underground Mine that it is managing into the Ashton Complex management plans, and the Department has recommended a condition to facilitate this.

Conclusion

Overall, the Department considers that the modifications would not increase the already approved GHG emissions, with a significant reduction compared to the resource approved to be extracted. The Department's conditions would restrict ongoing mining to that proposed in the modification report and the existing conditions of consent provide for further opportunity for minimisation of greenhouse gas emissions over the remaining life of the project.

5.7 Other issues

Other issues associated with the modification include potential impacts on heritage and biodiversity are summarised in **Table 4** below.

Table 1 | Summary of other issues

Issue	Findings	Recommendations	
Biodiversity	 Given the modifications do not involve changes to approved disturbance limits and there would be no increase in subsidence impacts (including to vegetation) associated with the modifications, there would be no incremental impacts on biodiversity. Under the existing consent conditions, biodiversity impacts are required to be monitored and managed in accordance with an approved Biodiversity Management Plan. Potential biodiversity impacts were not raised as a concern in any agency advice or public submissions. The Department considers that there would be no increase in impacts on biodiversity values as a result of the modifications. 	 The Department considers that the existing conditions remain appropriate for the development. The Department notes that the existing conditions require review and revision of the approved biodiversity management plans to incorporate the modifications. 	

Issue	Findings	Recommendations
Heritage	 Given the modifications do not involve changes to approved disturbance limits and there would be no increase in subsidence impacts (including to vegetation) associated with the modifications, there would be no impacts on Aboriginal cultural heritage or historic heritage values. Under the existing consent conditions, impacts on heritage values are required to be monitored and managed in accordance with an approved Aboriginal Cultural Heritage Management Plan and a Historic Heritage Management Plan. Potential heritage impacts were not raised as a concern in any agency advice or public submissions. 	 The Department considers that the existing conditions remain appropriate for the development. The Department notes that the existing conditions require review and revision of the approved Aboriginal Cultural Heritage Management Plan and Historic Heritage Management Plan to incorporate the modifications.
Social	 As the modifications propose extraction of a resource already approved for underground mining, social impacts of the proposal centre around continuation of mining and the associated impacts on the village of Camberwell until 2035. If approved, the mine life for both underground projects would be extended by approximately 11 years, providing ongoing employment benefits. The modifications do not propose any additional disturbance of land and are therefore not expected to have a significant impact on social amenity. The Department considers that the potential social impacts associated with the extraction and processing of this resource are overall consistent with the currently approved projects. However, the Department acknowledges that the impacts would be extended from the current approved cessation of mining operations in 	The Department considers that the existing conditions remain appropriate for the development.
Economic	 The economic benefits of the proposed modifications include recovery of an otherwise sterilised resource, continued employment for the existing ACOL workforce of some 270 full time equivalent employees, continued business and employment for local support industries and continued use of existing equipment and infrastructure. The proposed modifications would also provide operational and economic efficiencies by allowing Glencore to recover a further 19.4 Mt of the remaining 93.1 Mt of coal approved to be mined at the Ravensworth Underground Mine which would otherwise be left unmined. The recovery of this resource, as proposed by the modifications, would also be undertaken without the substantial capital investment associated with developing a new operation. Continued payment of royalties to the NSW Government associated with mining and resource recovery, with estimated royalties of around \$120 million (\$84 million net present value). 	The Department considers that the existing conditions remain appropriate for the development.

6 Evaluation

The Department has assessed the modification applications in accordance with the relevant statutory requirements, having regard to the approved projects and documentation provided with the application.

The Department has sought advice from relevant Government authorities and Council and none of these agencies objected to the modifications.

The Department also considered submissions received during the exhibition of the application, noting that one submission supported the modification applications and two objections were received. The two public objections raised concerns regarding impacts from greenhouse gas emissions.

The Department considers that the modification would significantly reduce the already approved greenhouse gas emissions associated with the Ravensworth Underground Mine and the Department has included conditions to restrict ongoing mining to only that proposed in the modification applications. The conditions also require that all reasonable and feasible measures be implemented to minimise GHG emissions and to prepare and implement Air Quality and Greenhouse Gas Management plans for this requirement to take effect.

Further, with the lapsing of the SEOC consent, the approved GHG emissions from this development would now not occur.

The Department also considers that the modifications would not result in any significant environmental, social or economic impacts beyond those already assessed and approved, acknowledging however that mining operations would continue until 2035. The Department also considers that the proposed modifications would allow for the efficient recovery of resources already approved for extraction.

The modifications would also allow ongoing employment for around 270 workers employed at the Ashton Mine Complex for an additional 11 years as the underground mining operations in the Ravensworth Underground Mine would be effectively integrated into the Ashton Mine Complex. The extraction of coal would also provide \$120 million in royalties that would not be realised without the modifications.

Overall, the Department considers that the proposed modifications should be approved, subject to revised conditions.

The Department has drafted recommended Notices of Modifications for DA 309-11-2001-i and DA 104/96 (see **Appendix B**) and a consolidated version of the development consents, as they are proposed to be modified (see **Appendix C**).

7 Recommendation

It is recommended that the Director, Resource Assessments, as delegate of the Minister for Planning:

- considers the findings and recommendations of this report;
- **determines** that the applications DA 309-11-2001-i (MOD 11) and DA 104/96 (MOD 10) fall within the scope of section 4.55(2) of the EP&A Act;
- accepts and adopts all of the findings and recommendations in this report as the reasons for making the decision to grant approval to the applications;
- modifies the consents DA 309-11-2001-i and DA 104/96; and
- signs the attached approval of the modification (Appendix B).

Recommended by:

29/06/2022

Sarah Clibborn

Senior Environmental Assessment Officer Resource Assessments Recommended by:

29/06/2022

Joe Fittell

Team Leader

Resource Assessments

8 Determination

The recommendation is **Adopted / Not adopted** by:

6/7/2022

Steve O'Donoghue

Director - Resources Assessments as delegate of the Minister for Planning

Appendices

Appendix A - List of Documents

A1 - Modification Report: Refer to folder "Modification Application" on the Department's website at

https://www.planningportal.nsw.gov.au/major-projects/project/42971 https://www.planningportal.nsw.gov.au/major-projects/project/42966

A2 - Submissions: Refer to folder "Submissions" on the Department's website at

https://www.planningportal.nsw.gov.au/major-projects/project/42971 https://www.planningportal.nsw.gov.au/major-projects/project/42966

A3 - Agency Advice: Refer to folder "Agency Advice" on the Department's website at

https://www.planningportal.nsw.gov.au/major-projects/project/42971 https://www.planningportal.nsw.gov.au/major-projects/project/42966

A4 - Submissions Report: Refer to folder "Response to Submissions" on the Department's website at

https://www.planningportal.nsw.gov.au/major-projects/project/42971 https://www.planningportal.nsw.gov.au/major-projects/project/42966

Appendix B – Notice of Modification

See the Department's Major Project's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/42971 https://www.planningportal.nsw.gov.au/major-projects/project/42966

Appendix C - Consolidated Consent

See the Department's Major Project's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/42971 https://www.planningportal.nsw.gov.au/major-projects/project/42966