Department of Planning, Housing and Infrastructure

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Tahmoor South Project Modification 3

State Significant Development

Modification Assessment Report (SSD 8445 MOD 3)

May 2025





Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Modification 3 of Tahmoor South Project (SSD 8445 MOD 3) Assessment Report

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Executive Summary

Tahmoor Coal Pty Ltd (Tahmoor Coal) owns and operates the Tahmoor Mine, an existing underground coal mine located approximately 75 kilometres (km) south-west of Sydney, in the Wingecarribee and Wollondilly local government areas.

Mining operations are permitted at Tahmoor Mine under the development consent (SSD 8445) issued in 2021 by the Independent Planning Commission for the Tahmoor South Project.

Tahmoor Coal is seeking to modify the development consent to facilitate the extraction of an additional 2 million tonnes of run-of-mine coal via a new longwall panel (LW S7A) and extend mining operations by 14 months until 31 December 2033 to accommodate the additional longwall.

The modification application was lodged under Section 4.55(2) of the *Environmental Planning and Assessment Act* 1979 (EP&A Act). The Minister for Planning and Public Spaces is the consent authority for the modification application.

The Department exhibited the modification from 5 July 2024 until 18 July 2024. During the exhibition period, the Department received two public submissions, both from special interest groups objecting to the application. No submissions were received from individuals. Comments were provided by both Wingecarribee and Wollondilly Council and advice was received from nine NSW Government agencies.

The Department considers the key assessment issue for the modification is the potential impact of subsidence on the natural and built environment.

Subsidence impacts, effects and environmental consequences associated with the proposed modification are predicted to remain consistent with those of the approved project and manageable within acceptable environmental standards. The Department is satisfied that the existing management framework established under the approved project is appropriate to manage impacts associated with the modification.

Tahmoor Coal has committed to the continued implementation of the subsidence management measures that have been successfully implemented during previous mining at Tahmoor Mine.

The Department has undertaken a comprehensive assessment of the full range of other potential impacts of the modification, including impacts on water resources, biodiversity, greenhouse gas emissions, heritage, air quality, noise and vibration, visual, rehabilitation and final landform. The Department considers that the existing conditions remain appropriate to manage any incremental impacts associated the modification, with some minor revisions, such as updating the greenhouse gas management plan in accordance with the EPA's Climate Change Policy and Climate Change Action Plan.

The Department's assessment found that the impacts of the modification would be consistent with those of the existing approved project and that Tahmoor Coal has demonstrated these impacts can be appropriately managed within the existing framework established under the development consent.

The modification would provide access to additional high-quality coking coal via existing mining infrastructure and has been designed in a manner that achieves a reasonable balance between the recovery of a State significant resource and minimising its potential environmental and social impacts.

On balance, the Department considers that the benefits of the proposed modification outweigh its residual impacts, and that the modification application should be approved, subject to the recommended conditions of consent.

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1 Introduction

1.1 Background

Tahmoor Mine is an existing underground coal mine located between Tahmoor and Bargo, approximately 75 kilometres south-west of Sydney, in the Wingecarribee and Wollondilly local government areas (see **Figure 1**).

Mining has been undertaken at the site since the 1970s and the mine is operated by Tahmoor Coal Pty Ltd (Tahmoor Coal).

Tahmoor Mine produces coking coal that is primarily used for steel production. The site is divided into three mining areas, Tahmoor Central, Tahmoor North and Tahmoor South (see **Figure 1**). Mining is complete in Tahmoor Central and Tahmoor North, with mining currently being undertaken in the Tahmoor South area only.

1.2 Approval history

Tahmoor Mine operates under a number of historical development consents, the most recent of which is the Tahmoor South Project (SSD 8445) (Tahmoor South). Tahmoor South was approved by the NSW Independent Planning Commission on 23 April 2021 and has been modified on two occasions. The development consent authorises:

- extraction and processing of up to four million tonnes per annum (Mtpa) of run-of-mine (ROM) coal until October 2032 using longwall mining methods;
- transport of up to 200,000 tonnes per annum of material (including ROM coal, product coal and coal reject material) by road; and
- transport of coal to the Port Kembla Coal Terminal via the mine's rail loading facilities.

Longwall extraction under the Tahmoor South development consent commenced on 18 October 2022.

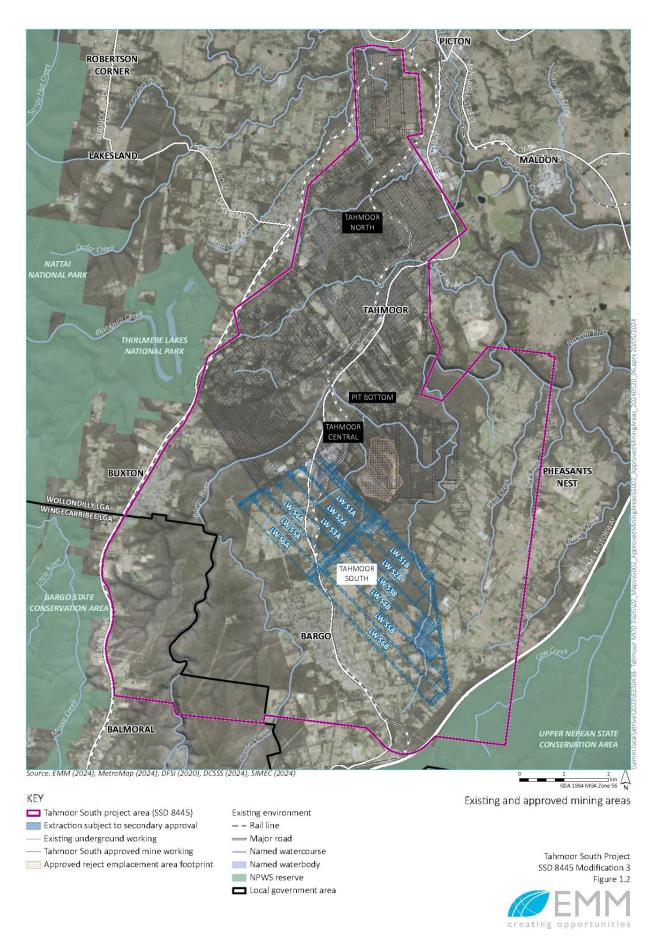


Figure 1 | Existing and approved mining areas

2 Proposed modification

Tahmoor Coal is seeking to modify SSD 8445 under Section 4.55(2) of the EP&A Act to facilitate:

- extraction of an additional 2 Mt of coal via a new longwall panel (LW S7A);
- removal of the restriction imposed by Condition A6 that requires mining be completed within 10
 years of commencement of second workings, enabling an extension of mining operations by 14
 months to 31 December 2033; and
- an increase in the maximum volume of ROM Coal extracted and processed on site from 33 Mt to 35 Mt.

The modification is described in detail in the Modification Report (**Appendix A**). The key aspects of the modification are summarised in **Table 1** and shown in **Figure 2**.

Table 1 | Key aspects of the modification

Project element	Approved project	Modified project
Project area	See Figure 1 .	No change.
Mining areas	See Figure 1 .	Addition of LW S7A (see Figure 2).
Mine life Mining operations may be carried out until 31 December 2033, or until 10 yes from the commencement of second workings, whichever is the sooner.		Mining operations carried out until 31 December 2033
Extraction and processing limit	Up to 4 Mt of ROM coal per annum. 33 Mt of ROM coal over the life of the development.	No change. 35 Mt ROM coal over the life of the development.
Mining method	Longwall mining method.	No change.
Coal reject management	Continued use of the existing Reject Emplacement Area, emplacing material up to a maximum height of RL 320 metres (m).	No change.
Transportation by rail	Up to 4 laden trains may leave the site in any 24-hour period.	No change.

Project element	Approved project	Modified project
Transportation by road	Up to 200,000 tonnes (t) per annum of material (including ROM coal, product coal, and coal reject material) may be transported to and from the site by road at a rate of: • 3,000 t per day • 16 truck movements per hour • 158 truck movements in total per day	No change.
Mine water management	Mine water is either transferred to the Tahmoor North mining area for temporary storage and future extraction and treatment or pumped directly to the water management system at the surface facilities area for treatment by a reverse osmosis water treatment plant. Treated mine water is reused underground or for other non-potable uses or discharged via the existing LDP1 to Teatree Hollow.	No change.
Brine disposal	Transfer of brine from the water treatment plant underground to the Western Domain mining area.	No change.
Operating hours	Underground mining 24 hours, 7 days; Road transportation of coal and/or coal reject material 7am to 6pm, Monday- Saturday; Construction activities 7am to 6pm, Monday-Friday and 8am to 1pm Saturdays; Drilling activities at ventilation shaft sites 24 hours, 7 days.	No change.
Rehabilitation	Progressive rehabilitation in accordance with a Rehabilitation Strategy and Rehabilitation Management Plan.	No change.
Workforce	400 full time equivalent employees.	No change.

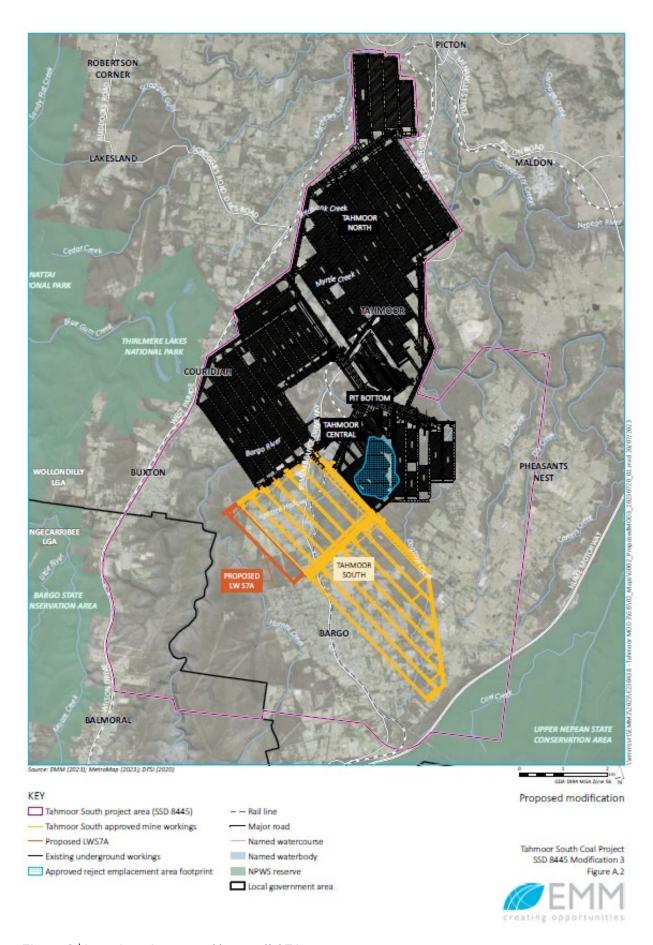


Figure 2 | Location of proposed longwall S7A

3 Statutory context

Details of the legal pathway under which the modification is sought are provided in Table 2.

Table 2 | Assessment pathway and decision maker

Consideration	Description
Scope of modification	The modification application was lodged under Section 4.55(2) of the EP&A Act. Under section 4.55(2) of the EP&A Act, a development consent cannot be modified unless the consent authority is satisfied that the modified proposal is substantially the same as the development for which consent was originally granted. The Department has considered the scope of the modification and is satisfied that the modified development would remain substantially the same as the development for which consent was originally granted, because: • the modification would not change the purpose or nature of the development; • there would be no change to the approved mining method, annual extraction or processing rates, coal handing and transport rates or surface infrastructure; and
	 the impacts of the modified development would remain consistent with those of the approved development and would continue to be managed under the existing framework establish by the consent. Accordingly, the Department is satisfied the proposed modification is within the scope of section 4.55(2) of the EP&A Act and may be determined accordingly.
Consent authority and decision maker	The Minister for Planning and Public Spaces (the Minister) is the consent authority for the application under section 4.5(a) of the EP&A Act. Under the Minister's delegations of 9 March 2022, the Director Energy and Resource Assessments may determine the application as less than 15 public submissions by way of objection were received, Wollondilly Shire and Wingecarribee Shire Councils did not object to the application, and Tahmoor Coal has not disclosed any reportable political donations.

3.1 Other approvals and authorisations

The NSW EPA has confirmed that the modification will be regulated under the mine's existing Environment Protection Licence (EPL) 1389, issued under the *Protection of the Environment Operations Act 1997* (POEO Act).

The Water Management Act 2000 (WM Act) regulates the use and interference with surface water and groundwater in NSW. Pursuant to Section 60I(2) of the WM Act, mining projects are required to hold a water access licence (WAL) authorising the take of water in the course of carrying out a mining activity.

Tahmoor Coal holds WALs authorising the take of water. The modification will require further WALs to be acquired by Tahmoor Coal to account for future passive groundwater take.

3.2 Matters for consideration

The Department has considered all relevant statutory requirements, including the objects of the EP&A Act and relevant matters listed under section 4.15(1) and 4.55(3) of the EP&A Act, and has summarised its findings in **Sections 5**, **6** and **Appendix B** of this report.

4 Engagement

4.1 Department's engagement

The Department publicly exhibited the modification application (see **Appendix A**) from 5 July 2024 until 18 July 2024 on the Department's website.

The modification application was referred to relevant NSW Government agencies, Wingecarribee Shire Council and Wollondilly Shire Council. Submitters on the original development application were also notified.

4.1.1 **Summary of public submissions**

The Department received two public submissions during the exhibition period, both from special interest groups objecting to the application. No submissions were received from individuals. All submissions are publicly available on the Department's website (see **Appendix A**).

The key issues raised in submissions related to:

- potential impacts on surface water and water-dependent fauna;
- concerns regarding groundwater drawdown;
- a lack of justification for the modification; and
- risks to human health associated with greenhouse gas emissions and global warming.

4.2 Agency advice

The Department received advice on the modification from nine NSW Government agencies. Wingecarribee Shire Council and Wollondilly Shire Council also provided comments.

A summary of the key comments made by government agencies is provided in **Table 3** and a link to full copies of all agency advice is provided in **Appendix A**.

Table 3 | Summary of Agency Advice and Council Comments

Agency	Key Comments
Environment Protection Authority (NSW EPA)	Noted the modification would be required to be assessed against the draft NSW EPA Guide for Large Emitters (2024) and requested a revised Greenhouse Gas Assessment and Mitigation Plan with the Submissions Report. EPA was satisfied that the Submissions Report and additional information provided by Tahmoor Coal addressed its advice and recommended additional conditions to ensure relevant plans appropriately identify interim and long-term reduction targets, address recommended emission estimate improvements and ongoing management of greenhouse gas emissions.
NSW DCCEEW Water Group	Initially requested further information on surface water take and water entitlement to account for maximum potential take. Recommended further information be provided regarding impact predictions at Hornes Creek. Recommended the groundwater model be regularly updated following approval and that any impacts to watercourses be remediated. These matters were addressed through additional information provided in the Submissions Report, with NSW DCCEEW Water Group finding the responses and revisions satisfactory.
Heritage NSW	Heritage NSW noted that the risk of impact to identified Aboriginal Cultural Heritage sites was low, and very unlikely to occur. Heritage NSW agreed with the proposed management measures for Aboriginal Cultural Heritage and recommended conditions of consent.

Agency	Key Comments
NSW DCCEEW - Conservation Programs, Heritage and Regulation (CPHR)	CPHR raised a range of concerns regarding the modification, including matters relating to water treatment and brine disposal that are outside the scope of the modification. CPHR also raised concerns relating to water licencing and groundwater modelling for which NSW DCCEEW Water Group has provided expert advice to the Department. The remaining issues raised by CPHR included concerns regarding subsidence impacts to Hornes Creek and aspects of the BDAR, including the assessment and offset of prescribed impacts, serious and irreversible impacts and water quality impacts associated with gas drainage. Following review of the Submissions Report, CPHR had persisting concerns regarding the need for offsetting of prescribed impacts and the adequacy of the groundwater assessment. The Department notes that the modification would not involve any clearing or direct impacts to biodiversity and any indirect impacts (such as subsidence related effects) are considered to be negligible. On this basis the Department is satisfied that offsets are not required. Further, the Department has considered the expert advice relating to groundwater as provided by NSW DCCEEW Water Group, who was satisfied with the additional information provided in the Submissions Report and had no residual concerns.
Crown Lands	Confirmed it had no further comments to those provided for the original development application.
Subsidence Advisory	Noted that additional dwellings would be subject to tilts of 7mm/m or greater, requiring more substantial repairs, including in some cases, relevelling of the building structure.
NSW Resources – Resources Regulator	Had no specific comments regarding mine safety or mine rehabilitation matters.
NSW Resources – Mining, Exploration and Geoscience Group	Provided a resource and economic assessment of the modification and confirmed that the Applicant holds the appropriate mining titles under the <i>Mining Act 1992</i> to lodge the modification application.
Rural Fire Service	Requested that a Fire Management Plan (FMP) be prepared for the facility in consultation with the local RFS District Office and that the Applicant actively engage with the Wollondilly-Wingecarribee Bush Fire Management Committee. The Department notes that SSD 8445 Condition B53 requires the preparation of a Bushfire Management Plan in consultation with the RFS.

Agency	Key Comments
Councils	
Wingecarribee Shire Council	Noted that the modification or subsidence zone of impact does not extend into their Shire. Requested that coal rail wagons be covered to minimise the effect of coal dust to the local population.
Wollondilly Shire Council	Raised broad concerns regarding potential impacts to watercourses and groundwater, subsidence impacts to dwellings and public infrastructure, biodiversity, and greenhouse gas emissions.

4.3 Submissions report

Tahmoor Coal responded to agency advice and the matters raised in submissions in a Submissions Report (see **Appendix A**). The Department made the Submissions Report publicly available on its website and forwarded it to relevant government agencies for review and comment on 14 November 2024.

5 Assessment

The Department considers the key matter for consideration for the modification is the potential for subsidence related impacts on natural and built features. The Department's consideration of these impacts, as well as other potential impacts of the modification, is provided in the following sections.

5.1 Subsidence

A Subsidence Impact Assessment was prepared for the modification by Mine Subsidence Engineering Consultants (MSEC). The assessment considered subsidence-related impacts to natural, cultural and built features associated with LW S7A, as well as the cumulative impacts of LW S7A and mining already approved at Tahmoor South.

The key natural, cultural and built features considered in the assessment are shown in **Figure 3** and **Figure 4** and include Bargo River, Hornes Creek, Teatree Hollow, cliffs, houses and public infrastructure.

The Department notes that in designing LW S7A, Tahmoor Coal has sought to minimise impacts to natural and built features by:

- reducing the length of LW S7A by 130 m to minimise the number of houses impacted by subsidence;
- maintaining an offset distance from the Bargo River of approximately 520 m;
- maintaining an offset distance from Hornes Creek of approximately 330 m; and
- avoiding mining beneath cliffs.

5.1.1 Subsidence predictions

The modification would result in a small increase (50 mm) in maximum total subsidence associated with the A series longwalls. The modification would not change the maximum total subsidence associated with the B series longwalls, or the maximum approved subsidence for the Tahmoor South development, which is associated with the approved B series longwalls.

Incremental and cumulative subsidence predictions associated with LW S7A is shown in Table 4.

Table 4 | Predicted maximum subsidence impacts of Longwall S7A only and cumulative

Panel		Vertical Subsidence (mm)	Tilt (mm/m)	Hogging Curvature (km ⁻¹)	Sagging Curvature (km ⁻¹)
Incremental	impacts				
LW S7A only		1,050	8.9	0.10	0.24
Cumulative i	mpacts				
Approved Layout	A Series (After LW S6A)	1,350	9.5	0.14	0.24
Modified Layout	A Series (After LW S7A)	1,400	10.0	0.14	0.25

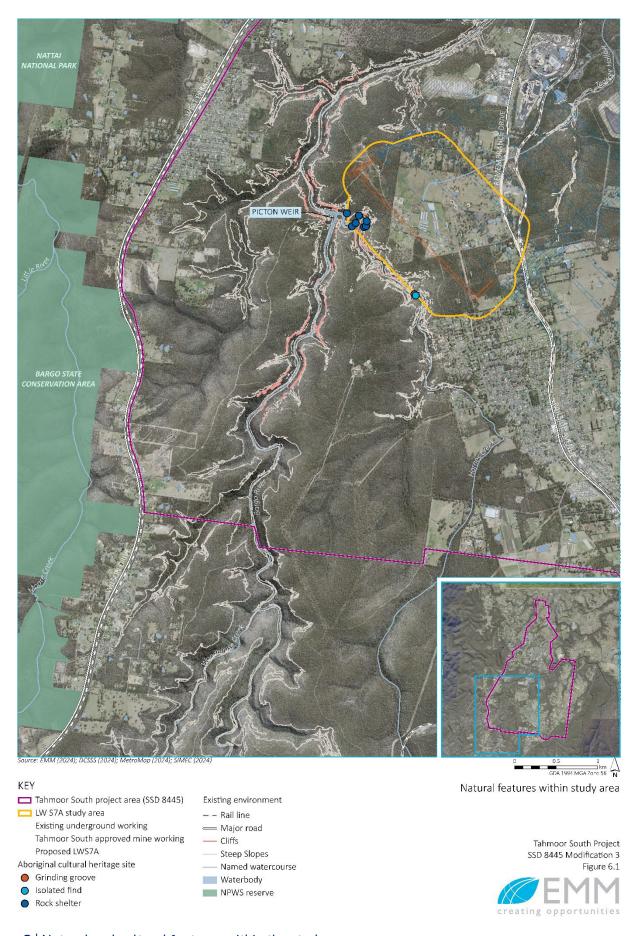


Figure 3 | Natural and cultural features within the study area

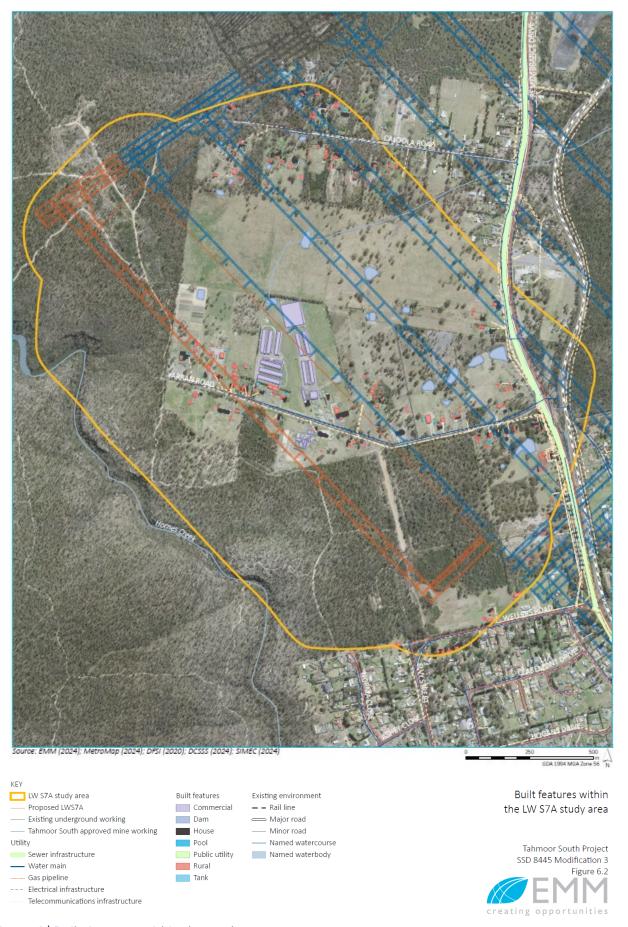


Figure 4 | Built features within the study area

5.1.2 Impacts to natural features

Bargo River

The modification is not predicted to impact the Bargo River, which is located a minimum of 520 m from LW S7A.

Hornes Creek

The modification would increase predicted subsidence movements at Hornes Creek, with the greatest movement predicted at the sharp bend in Hornes Creek closest to LW S7A (a distance of 330 m away).

The risk of impacts to Hornes Creek as a result of this subsidence has been assessed as very low to negligible, including a very low likelihood of fracturing of the stream bed and negligible change in gradient, ponding, surface water flow and bed scouring.

As noted in **Section 4.2**, the CPHR Group expressed concern regarding potential mining related effects to Hornes Creek, particularly in regard to surface fracturing and reduced surface water flow. The Department acknowledges CPHR's concern, however following careful review, the Department accepts the findings of the detailed technical assessments prepared for the modification and agrees that there is a very low risk of fracturing or impact to streamflow or water quality in Hornes Creek due to the modification.

Teatree Hollow

LW S7A is located directly beneath the upstream end of Teatree Hollow, an ephemeral drainage line within which stream flow is captured by farm dams. The modification has the potential to result in fracturing of the stream bed and flow diversion within Teatree Hollow, consistent with the approved project. The modification would not materially change the approved impacts however these impacts would extend further upstream in Teatree Hollow.

Cliffs and steep slopes

The modification is not predicted to result in cliff or slope instability or risk to public safety.

5.1.3 Impacts to built features

Houses

A total of 53 houses are predicted to experience minor serviceability issues as a result of the modification, requiring remediation using standard building techniques. A further nine houses are

predicted to experience greater serviceability impacts requiring, in some cases, more substantial remediation measures, such as relevelling of the building structure.

All houses would however remain safe and serviceable at all times during and after the extraction of LW S7A.

Public infrastructure

All public infrastructure is predicted to remain safe and serviceable at all times during and after the extraction of LW S7A.

5.1.4 **Conclusion**

Based on the findings of the Subsidence Impact Assessment, the Department is satisfied that the predicted subsidence impacts, effects and environmental consequences associated with LW S7A are materially the same as those of the approved Tahmoor South project. For this reason, the Department is satisfied that the existing management framework established under the approved project is appropriate to manage impacts associated with the modification.

Tahmoor Coal has committed to the continued implementation of the subsidence management measures that have been successfully implemented during previous mining at Tahmoor Mine, including:

- preparation and implementation of individual subsidence management plans for all built infrastructure in consultation with the infrastructure owners:
- detailed pre-mining assessment of impacts to surface infrastructure;
- monitoring of subsidence movements;
- monitoring of infrastructure condition during and after mining; and
- implementation of early intervention measure to further protect the safety and serviceability of infrastructure based on pre-determined trigger levels and monitoring data.

The Department notes that the existing consent requires Tahmoor Coal to review all management plans following any modification and to undertake the development generally in accordance with any commitments made as part of the application. No changes are therefore recommended to existing subsidence management conditions in response to the modification.

5.2 Other issues

The Department's consideration of other issues is summarised in **Table 5**.

Table 5 | Assessment of other issues

Findings and conclusions	Recommended conditions
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Water Resources

- Groundwater and Surface Water Impact Assessments were prepared for the modification by SLR and ATC Williams respectively (Appendix F and G of the Modification Report).
- The Groundwater Assessment concluded that predicted impacts on groundwater drawdown and baseflow losses from streams remain generally consistent with those predicted for the approved project. Specifically, the assessment predicted the modification would result in:
- increases in groundwater inflows of up to 0.07 ML/day, up to a cumulative peak of 0.88 ML/day across the A series longwalls;
- drawdown of the water table of less than 20 metres (m) in the immediate vicinity of LW S7A and less than 5 m
 across much of the approved project footprint, with the 1 m drawdown contour contained within the existing mining leases;
- negligible impacts to groundwater dependent ecosystems (Thirlmere Lakes) and alluvium baseflow;
- no additional private bores would experience a drawdown of greater than 2 m;
- no significant change in the baseflow of creeks;
- no change in impact or risk of impact associated with the ongoing storage of brine in the underground workings;
- compliance with the minimal impact considerations of the NSW Aquifer Interference Policy.
- The Surface Water Assessment concluded that impacts to surface water quality and quantity would be negligible.
- Tahmoor Coal hold sufficient surface water entitlements to account for predicted surface water take associated with the modification, however an additional entitlement of up to 1,217 ML in the Sydney Basin Nepean

No change to existing conditions required

Groundwater Source (Nepean Management Zone 2) is predicted to be required by 2033-34 to account for passive take of groundwater inflows.

- NSW DCCEEW Water noted the need for Tahmoor Coal to hold the necessary water access licences for the project and raised no residual concerns regarding the modification.
- The existing groundwater and surface water monitoring networks are considered suitable for monitoring the potential incremental impacts of the modification.
- The Department is satisfied that impacts to water resources would be consistent with those of the approved project and able to be managed under the existing monitoring and management framework established by the conditions of consent.

Biodiversity

- The modification application included a Biodiversity Development Assessment Report (BDAR), prepared by Niche Environment and Heritage (Appendix C to the Modification Report). Based on advice from CPHR, an updated BDAR was provided as part of the Submissions Report.
- The modification does not involve any clearing or direct impacts to biodiversity. Potential biodiversity impacts are limited to subsidence related effects to waterways, drainage lines and cliff line areas that provide habitat for threatened species or ecological communities.
- The potential for subsidence related impacts has been assessed as negligible and unlikely to adversely impact any threatened ecological community, threatened flora, fauna, their populations or habitats.
- As the modification does not impact biodiversity values, an offset liability would not typically be required. However, due to limitations of the BAM-C calculator used to calculate credit liabilities under a BDAR, it is not possible to enter a zero value for the area of biodiversity impacted by a development. Therefore, Tahmoor Coal has entered the smallest impact area permitted under the BAM-C of 0.01 ha across each of the PCTs within the study area,

Additional condition requiring retirement of the credit liability identified by the BDAR.

generating a nominal credit liability of 6 ecosystem credits. While the Department acknowledges that this liability has been generated in error due to limitations of the BAM-C, a condition requiring retirement of the liability has been recommended.

- CPHR raised residual concerns regarding offsetting of prescribed (subsidence related) impacts. The Department notes however that the potential for prescribed impacts to waterways, drainage lines and cliff lines have been avoided and minimised through setbacks from these key features and are predicted to be negligible. On this basis the Department is satisfied that additional offsets are unlikely to be required for prescribed impacts.
- The Department is satisfied that impacts to biodiversity would be negligible and manageable under the existing conditions of consent.

Greenhouse Gas

- The modification application included a greenhouse gas (GHG) assessment (Appendix I to the Modification Report), which was updated as part of the Submissions Report following advice from the EPA recommending the modification be assessed against the draft NSW EPA Guide for Large Emitters (2024). Additional information responding to matters raised by the EPA was also provided during the assessment of the application. A link to this information is provided in Appendix A.
- The EPA is the primary regulator of GHG emissions in NSW under the POEO Act.
- The EPA was satisfied that the Submissions Report and additional information addressed its advice on the modification and recommended that additional conditions be imposed to ensure that relevant plans appropriately identify interim and long-term reduction targets, address recommended emission estimate improvements and ongoing management of greenhouse gas emissions.
- The modification is estimated to result in an additional 1.14 Mt CO²-e of Scope 1 and Scope 2 emissions, the majority of which (~80%) are associated with ventilation air methane.

Minor changes to reflect requirements of the EPA's Climate Change Policy and Climate Change Action Plan.

• An addition 6.87 Mt CO²-e of Scope 3 emissions would be associated with the combustion and transport of coal to receiving markets. Scope 3 emissions would be accounted for as Scope 1 emissions in other countries and jurisdictions.

- With the modification, the Tahmoor South Project would maintain a similar emissions trajectory as for NSW, with Tahmoor South emissions reducing by an average of 7.2% to 2030 and 10.2% to 2035 compared to 7.6% and 8.6% respectively for NSW in general. It is noted that emissions from Tahmoor South reduce significantly in 2033 at the end of mining.
- The conditions of consent for the project require Tahmoor Coal to implement all reasonable and feasible measures to minimise GHG emissions and to review these measures every three years to determine if there are any further measures that could be implemented.
- Tahmoor Coal implement a range of best practice GHG management measures at the mine and is actively investigating a number of additional measures for implementation. Measure currently implemented include continuous emissions monitoring and pre and post gas drainage. Gas drained from the coal seam is tested for methane concentration and, depending on concentration, is either used to generate electricity, flared or vented, resulting in a reduction in total mine annual Scope 1 emissions of approximately 34% relative to the uncontrolled venting of captured gas.
- Additional measures being investigated include flare optimisation, increasing power generating capacity of the
 current combustion system and utilising regenerative thermal oxidiser (RTO) technology for the destruction of
 ventilation air methane. Progress on these investigations will be reported to the Department in 2026.
- During the assessment of the modification, the Department met with representatives of the special interest group Lock the Gate and received a presentation from Ember Energy regarding prioritisation of ventilation air methane abatement opportunities at Tahmoor. The Department agrees that further reasonable and feasible methane abatement opportunities should be adopted as soon as reasonably practical, and that current investigations being undertaken by Tahmoor Coal to identify the most effective mix of abatement methods based on gas composition in

the Tahmoor South mining area is key to this process. The results of this investigation will be reported concurrently with the next review of available mitigation measures in April 2026. Further methane abatement measures recommended through this process would be required to be implemented as soon as reasonably practical.

- The Department notes that the project is subject to emissions caps under the Commonwealth Safeguard Mechanism, requiring a reduction in baseline emissions of 4.9% per year to 2030, and is required to report annual emissions under the Commonwealth National Greenhouse and Energy Reporting Scheme.
- As the holder of an Environment Protection Licence under the POEO Act, Tahmoor Coal will be required to prepare a GHG mitigation plan (or similar) in accordance with requirements that are currently being developed by the EPA. Following advice from the EPA, the Department has recommended a condition requiring the preparation of a Greenhouse Gas Mitigation Plan for the project within 6 months.
- The Department has carefully considered the increase in GHG emissions in the context of NSW and Commonwealth initiatives, including the emissions reduction targets and guiding principles set out in the Climate Change (Net Zero Future) Act 2023 (see Appendix B). The Department considers that these increases would be able to be effectively managed under current NSW GHG policy initiatives to ensure that NSW targets would not be compromised, including the overall purpose and guiding principles of the Net Zero Future Act.

Aboriginal Cultural Heritage

- The modification application included an Aboriginal cultural heritage assessment (ACHA) (Appendix D to the Modification Report), prepared in consultation with the Registered Aboriginal Parties (RAPs).
- The ACHA identified six Aboriginal cultural heritage sites within the modification study area. Subsidence modelling predicts the risk of impact to all sites would be low and very unlikely to occur.
- Tahmoor Coal committed to update the existing Heritage Management Plan to include the newly recorded sites and reflect measures proposed to record and monitor these sites.

No change to existing conditions required

Findings and conclusions	Recommended conditions
 Heritage NSW agreed that the risk of impact to sites was low and able to be appropriately managed with the measures proposed in the ACHA. Heritage NSW recommended the Heritage Management Plan be updated to reflect these measures. 	
• The Department is satisfied that impacts to Aboriginal cultural heritage are unlikely and able to be appropriately managed with existing conditions of consent, which require all management plans to be reviewed following any modification of the development consent.	
Historic Heritage	
 No historic heritage sites are located within the study area and no impacts to historic heritage sites are predicted. The Department is satisfied that the modification would not impact historic heritage. 	No change to existing conditions required.
Air Quality	
 The modification does not propose an increase in extraction rate or additional surface infrastructure. The air quality impacts of the modified development would remain consistent with those previously assessed and approved. Wingecarribee Shire Council requested consideration of covered rail wagons to reduce coal dust impacts from trains. In the Submissions Report, the Applicant confirmed that water sprays are utilised during train loading to minimise the potential for emission from exposed coal in wagons. The Department is satisfied that air quality impacts would remain consistent with those previously assessed and 	No change to existing conditions required.
approved and can be appropriately managed under the existing conditions of consent. Traffic	

Findings and conclusions	Recommended conditions
 No increase in approved road or rail movements would be required for the modification. The Department considers the additional duration of these impacts (up to 14 months) would have negligible additional impact on the local and regional road network from those already approved. The Department is satisfied that the traffic impacts of the project would remain consistent with those previously assessed and approved and can be appropriately managed under the existing conditions of consent. 	No change to existing conditions required
Noise	
 The modification does not propose any changes to noise generating elements of the project, including surface infrastructure, equipment or facilities. The Department is satisfied that the noise impacts of the modified development would remain consistent with those previously assessed and approved and can be appropriately managed under the existing conditions of consent. 	No change to existing conditions required
Reject management	
 Additional reject generated from LW7A would be accommodated within the approved capacity of the existing Reject Emplacement Area (REA). No changes to the approved height or footprint of the REA are proposed by the modification. 	No change to existing conditions required
Rehabilitation	
• The modification would not impact on the approved rehabilitation plans of the project and sufficient capacity exists within the approved REA for reject material associated with the modification.	No change to existing conditions required

Findings and conclusions	Recommended conditions
• A Rehabilitation Management Plan for Tahmoor Mine has been prepared in accordance with the <i>Mining Regulation</i> 2016 and conditions of the development consent and would be updated following determination of the modification.	
Visual	,
• The Department is satisfied that the modification would not result in any visual impacts, as it does not propose any changes to visual elements of the project, including REA or surface facilities.	No change to existing conditions required
Social and Economic	
• The modification would provide ongoing employment of the existing workforce for an additional 14 months and associated flow on benefits to the state, regional and local economies.	No change to existing conditions required
• The additional resource would also generate royalties for the State with an estimated value of \$40M.	
• The Department considers that the modification would not lead to any significant change in social impacts, but it would extend any existing positive or negative impacts for further 14 months.	
• Tahmoor Coal would continue to manage social impacts associated with its operations in accordance with the existing approved Social Impact Management Plan and associated engagement plan.	
• The Department is satisfied that social impacts can continue to be acceptably managed under the existing conditions of consent.	

6 Evaluation

The Department has assessed the merits of the modification in accordance with the relevant requirements of the EP&A Act, advice from government agencies, local councils and public submissions, and strategic government policies and plans.

The key matters for consideration for the modification are the potential for subsidence related impacts on natural and built features, including impacts on key water resources in the region include Hornes Creek, Bargo River and the regional water table.

The Department's assessment found that the subsidence impacts, effects and environmental consequences of the modification would be consistent with those of the existing approved project and manageable within acceptable environmental standards. Tahmoor Coal has demonstrated these impacts can be appropriately managed within the existing framework established under the development consent.

The modification would provide access to additional high-quality coking coal via existing mining infrastructure, while providing ongoing employment for the existing workforce for a further 14 months and associated flow on benefits to the State, regional and local economies. The Department is satisfied that the project has been designed in a manner that achieves a reasonable balance between the recovery of a State significant resource and minimising its potential environmental and social impacts.

On balance, the Department considers that the benefits of the proposed modification outweigh its residual impacts, and that the modification application should be approved, subject to the recommended conditions of consent.

The Department has drafted an Instrument of Modification for the proposed modification (see **Appendix C**) and a consolidated version of the development consent, as it is proposed to be modified (see **Appendix D**).

7 Determination

It is recommended that the **Director Energy and Resource Assessments**, as delegate of the Minister for Planning and Public Spaces:

- considers the findings and recommendations of this report;
- determines that the modification application falls within the scope of section 4.55(2) of the EP&A Act;
- accepts and adopts the findings and recommendations in this report as the reasons for making the decision to approve the modification;
- modifies the consent for the Tahmoor South Project (SSD 8445), subject to the conditions in the attached instrument of modification; and
- signs the attached instrument of modification (see Appendix C).

Recommended by:

26/05/2025

Gabrielle Allan

Team Leader

Energy, Resources and Industry

The recommendation is **adopted** by:

26/05/2025

Jessie Evans

Ywans

Director Energy and Resource Assessments

Energy, Resources and Industry

Appendices

Appendix A – List of Referenced Documents

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

https://www.planningportal.nsw.gov.au/major-projects/projects/mod-3-longwall-s7a

A2 – Submissions and agency advice: Refer to folder "Submissions" and "Agency Advice" on the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/mod-3-longwall-s7a

A3 – Submissions Report: Refer to folder "Response to Submissions" on the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/mod-3-longwall-s7a

A4 – Additional information: Refer to folder "Additional Information" on the Department's website at: https://www.planningportal.nsw.gov.au/major-projects/projects/mod-3-longwall-s7a

Appendix B - Statutory considerations

Objects of the EP&A Act

A summary of the Department's consideration of the relevant objects (found in section 1.3 of the EP&A Act) are provided in **Table 6** below.

Table 6 | Objects of the EP&A Act and how they have been considered.

Object	Consideration
(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,	The modification promotes economic welfare of the wider community through continued employment and promotes proper development of the State's resources by maximising recovering of resources from within an existing mining lease utilising existing infrastructure.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The Department considers that the modification can be carried out in a manner that is consistent with the principles of ecologically sustainable development as the modification requires no clearing of native vegetation; has no known impacts to Aboriginal cultural heritage; and would have minimal environmental impacts beyond those already approved.

Object	Consideration
(c) to promote the orderly and economic use and development of land,	The Department considers that the modification represents an orderly and economic use of land.
(d) to promote the delivery and maintenance of affordable housing,	This object is not applicable to the proposed modification.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The modification does not require any land clearing and is predicted to have negligible impacts on threatened species, communities and key habitats, including Hornes Creek and the Bargo River.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The modification would not directly impact Aboriginal cultural heritage or non-Aboriginal heritage.
(g) to promote good design and amenity of the built environment,	The modification application has been assessed in consultation with Wingecarribee and Wollondilly Shire Councils, and relevant NSW government authorities, and considered the issues raised by these agencies in its assessment.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Department has assessed subsidence impacts of the modification and considers that impacts to buildings are minimal and can be adequately managed.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the state,	The modification application has been assessed in consultation with relevant Councils and relevant NSW government authorities and considered the issues raised by these agencies in our assessment.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department made the Modification Report publicly available on its website, exhibited the application and sought advice from Council and relevant government agencies.

Matters for consideration under s4.15 of the EP&A Act

The Department's consideration of the matters for consideration under section 4.15 of the EP&A Act is provided in **Table 7**.

Table 7 | Matters for consideration under section 4.15 of the EP&A Act

Matter	Consideration
Environmental Planning Inst	ruments
State Environmental Planning Policy (Planning Systems) 2021	The proposed modification is for the purposes of coal mining which is identified as State Significant Development by Clause 5 of Schedule 1 of the Planning Systems SEPP.
State Environmental Planning Policy (Resources and Energy) 2021	Part 2.3 of the Resources and Energy SEPP lists matters that must be considered by a consent authority before determining an application for the purposes of mining. The Department has considered these matters in its assessment of the modification (throughout Section 5 , as applicable) and has included a brief outline of key considerations below.
	Section 2.16 - Non-discretionary development standards
	The modification would not change the air, noise or blasting impacts of the approved project.
	The modification complies with the minimal impact considerations of the NSW Aquifer Interference Policy.
	Section 2.17 - Compatibility of mine with other land uses
	The Department has considered the impacts of the modification on land uses in the vicinity of the modification (refer to Section 5) and agrees that with the implementation of proposed mitigation and management measures, the modification is compatible with these land uses. Noting specifically that all public infrastructure and private structures would remain safe and serviceable during and following mining of LW S7A.
	Section 2.18 – Voluntary land acquisition and mitigation policy
	The modification would not trigger any provisions of the Voluntary Land Acquisition and Mitigation Policy relating to the mitigation or avoidance of noise or particulate matter impacts or acquisition of land affected by those impacts.
	Section 2.19 – Compatibility of proposed development with mine
	Not applicable.
	Section 2.20 - Natural resource management and environmental management
	Section 2.20 requires that the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure that impacts on significant surface water and groundwater resources, threatened species and

biodiversity are avoided or minimised to the greatest extent practicable and that greenhouse gas emissions are minimised to the greatest extent practicable.

Impacts to threatened species, biodiversity, groundwater and surface water due to the modification are consistent with those of the existing approved development (refer to **Section 5).** The Department considers the existing conditions of consent are appropriate to manage impacts associated with the modification.

The existing development consent includes conditions requiring Tahmoor Coal to implement all reasonable and feasible measures to minimise GHG emissions and to review these measures every three years to determine if there are any further measures that could be implemented. Following advice from the EPA and the introduction of the EPA's *Guide for Large Emitters* (2024), minor updates were recommended to existing conditions of consent relating to greenhouse gas emissions in order to address the requirements of the new guide.

Section 2.20 (2) requires the consent authority to consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.

The Department has considered the greenhouse gas assessment prepared in support of the modification, in consultation with the EPA and having regard to applicable State and national policies and guidelines, including the guiding principles of the *Climate Change (Net Zero Future) Act 2023* (refer to **Table 8**).

The Department considers the existing and proposed conditions of consent establish an appropriate framework for minimising greenhouse gas emissions associated with the modification, including a proposed condition requiring preparation of a Greenhouse Gas Mitigation Plan in accordance with the requirements of the EPA's Climate Change Policy and Climate Change Action Plan.

Section 2.21 - Resource Recovery

The Department has considered the recovery of coal resources in its assessment of the modification. It considers that the modified project can be carried out in an efficient manner that optimises coal resource recovery while giving appropriate recognition and protection for environmental values.

Section 2.22 - Transport

Existing conditions of consent are considered appropriate to manage the transport of coal from the modification.

Section 2.23 - Rehabilitation

There would be no additional land disturbance from the modification. Accordingly, the Department does not consider there would be any changes to rehabilitation requirements of the project and the existing conditions are adequate to manage rehabilitation.

Matter	Consideration	
State Environmental Planning Policy (Resilience and Hazards) 2021	The Department's assessment of the Tahmoor South Project found the project not to be potentially hazardous and did not require preparation of a hazard analysis. The modification does not change the outcomes of this assessment.	
Wollondilly Local Environmental Plan 2011	The modification is located within the Wollondilly LGA, on land zoned: C2 – Environmental Conservation; R5 – Large Lot Residential; RU1 – Primary Production; RU2 – Rural Landscape; RU4 – Primary Production Small Lots.	
	The development is prohibited on some land zones under the Wollondilly LEP, however, is permissible under Section 2.6 of the <i>State Environmental Planning Policy (Resources and Energy) 2021</i> , which prevails to the extent of any inconsistency.	
The likely impacts of the development		
The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.	Refer to Section 5.	
The suitability of the site for	the development	
The suitability of the site for the development	The modification would not alter the conclusions of the original assessment of the project in relation to the suitability of the site for the development.	
Submissions		
Any submissions made in accordance with this Act or the regulations	Refer to Section 4.	
Public interest		
Ecologically sustainable development (ESD)	The Department assessed the original project against the principles of ESD and concluded it can be carried out in a manner that is consistent with the principles of ESD. The modification would not alter the conclusions of this original assessment in relation to ESD.	

Reasons for granting consent to the original development

In accordance with section 4.55(3) of the EP&A Act, in determining this modification, the Department has taken into consideration the reasons for the IPC's decision to grant consent to the Tahmoor South Project (SSD 8445), as outlined in its Statement of Reasons dated 23 April 2021.

The Department notes that in determining the application, the IPC agreed that the project was strategically justified and in the public interest, and that the identified impacts can be appropriately managed through the conditions of consent imposed.

Climate Change (Net Zero Future) Act 2023

In assessing the impact of GHG emissions of the proposed modification, the Department has considered applicable policies, programs and guidelines. Specifically, the Department has carefully considered the proposed modification against the Guiding Principles in the *Climate Change (Net Zero Future) Act 2023*. The principles relate to how action to address climate change should be undertaken and what should be taken into account.

A summary of how the Department has considered these Guiding Principles is provided in **Table 8**.

Table 8 | Summary of consideration of modification against Guiding Principles in the *Climate Change (Net Zero Future) Act 2023*

Guideline Principle	Consideration
(1) For this Act, the guiding principles are the principles set out in this section.	Noted
(2) There is a critical need to act to address climate change, which is a serious threat to the social, economic and environmental wellbeing of New South Wales.	Noted
(3) Action to address climate change should be taken as early as possible to minimise the cost and adverse impacts of climate change.	The modification would not significantly compromise the NSW emissions reduction trajectory to achieve interim target reductions and net zero by 2050. This trajectory aligns with the timing of national commitments under the Paris Agreement 2015.

Guideline Principle	Consideration
 (4) Action to address climate change should be taken in a way that — a) is fiscally responsible, and b) promotes sustainable economic growth, and c) considers the economic risks of delaying action to address climate change, and d) considers the impact on rural, regional, and remote communities in New South Wales. 	The modification is an extension to an existing mining operation, which would have lesser environmental impacts than a new mining development. The modification would provide ongoing employment of the existing workforce and provide significant economic benefit to NSW. GHG emissions associated with the modification would not significantly compromise the NSW emissions reduction trajectory to achieve target reductions and net zero by 2050. The modification would provide continued economic and employment benefits to the local region and NSW.
(5) Action to address climate change should be consistent with the right to a clean, healthy and sustainable environment.	The Department has concluded that the impacts associated with the modification are acceptable subject to the recommended conditions.
(6) Action to address climate change should be consistent with the principles of ecologically sustainable development described in the Protection of the Environment Administration Act 1991, section 6(2).	The Department's assessment has concluded that the modified project would remain consistent with the principles of ESD (refer to Table 7).
(7) Action to address climate change should involve appropriate consultation with affected persons, communities and stakeholders.	The modification was publicly exhibited and the Department received two submissions from special interest groups. The Department also met with special interest groups during its assessment of the modification. The Department carefully considered the submissions and representations made on the modification, including those that raised concerns about climate change. The Department also consulted with relevant government agencies on the modification (refer to Section 5.0).
 (8) Action to address climate change should take into account the following — (a) the knowledge and perspectives of Aboriginal communities, 	The modification application included consultation with RAPs in accordance with the NSW government's Aboriginal heritage consultation guidelines. The views of RAPs were considered in the Department's assessment of the application.

Guideline Principle	Consideration
(b) the best available science,	The estimation of GHG emissions for the modification were undertaken in accordance with the <i>National Greenhouse</i> Accounts Factors Workbook (DCCEW 2024).
	Emissions estimates were reviewed by the EPA in consultation with the NSW Government's Net Zero Emissions Modelling Team.
	Emissions were considered in the context of the NSW emissions reduction trajectory developed by the NSW Government's Net Zero Emissions Modelling Program.
	Emissions from the project would maintain a similar emissions reduction trajectory as for NSW with the modification, and would not significantly compromise NSW target reductions and net zero by 2050.
(c) the knowledge of rural, regional and remote communities in New South Wales,	The modification application included consultation with the community consultative committee (CCC) and exhibition of the modification report that informed the Department's assessment.
 (d) the need to support local communities, including Aboriginal communities, who may be affected by the action, including by — (i) considering the impact on local employment and industries, and (ii) diversifying local economies, and (iii) encouraging local procurement, and (iv) optimising job creation and employment transition opportunities, and (v) considering the impact on the amenity of local communities, 	The modification would provide ongoing employment of the existing workforce for an additional 14 months, provide continued support for local suppliers and associated flow on benefits to the state, regional and local economies, without significant adverse impacts on the amenity of the local community.
(e) the need for education and skills diversification,	Not applicable. The modification would provide ongoing employment of the existing workforce for an additional 14 months. The requisite education and skills have been obtained.
(f) the need to ensure essential utilities and infrastructure are provided, including energy, water, telecommunications and transport,	All public infrastructure and utilities would remain safe and serviceable at all times if the modification was to proceed.

Guid	leline Principle	Consideration
(g) the impact of the action on consumer costs in New South Wales, including energy costs,	The modification would provide metallurgical coal for steel making both domestically and internationally. A domestic supply of coal is required for cost-effective steel manufacturing in Australia. The modification is unlikely to impact energy costs.
((h) the need to reduce the risk climate change poses to human health,	Emissions from the project would maintain a similar emissions reduction trajectory as for NSW with the modification, and would not significantly compromise NSW target reductions and net zero by 2050.
(i) equity and social justice impacts on socially disadvantaged groups and economically vulnerable regions,	The modification would provide ongoing employment of the existing workforce for an additional 14 months and associated flow on benefits to the state, regional and local economies. Emissions from the project would maintain a similar emissions reduction trajectory as for NSW with the modification, and would not significantly compromise NSW target reductions and net zero by 2050. The modification is therefore unlikely to significantly impact equity, social justice, socially disadvantaged groups or economically vulnerable regions.
(i) the need to reduce the risk climate change poses to the survival of all species.	Emissions from the project would maintain a similar emissions reduction trajectory as for NSW with the modification, and would not significantly compromise NSW target reductions and net zero by 2050.
	Action to address climate change should take into account the impact on animals.	The modification application included a Biodiversity Development Assessment Report that found the modification was unlikely to adversely impact biodiversity values.
1	The Government of New South Wales is responsible for— a) urgently developing and implementing strategies, policies and programs to address climate change, and (b) ensuring the Government of New South Wales pursues best practice in addressing climate change	The EPA is developing these policies and plans under its Climate Change Policy and Climate Change Action Plan which have been considered in the assessment of this modification.

Appendix C – Instrument of Modification

Refer to "Determination" folder on the Department's website at: https://www.planningportal.nsw.gov.au/major-projects/projects/mod-3-longwall-s7a

Appendix D - Consolidated Development Consent

Refer to "Consolidated Consent" folder on the Department's website at: https://www.planningportal.nsw.gov.au/major-projects/projects/mod-3-longwall-s7a