



Tahmoor South Coal Project Modification 1

Extension of time to commission water treatment plant
State Significant Development Modification Assessment
(SSD 8445 MOD 1)

July 2022



Published by the NSW Department of Planning and Environment

dpie.nsw.gov.au

Title: Tahmoor South Coal Project Modification 1

Subtitle: Extension of time to commission water treatment plant

Cover image: *Tahmoor Mine Surface Facilities Site*

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1 Introduction

1.1 Background

Tahmoor Coal Mine is an underground coal mine that has been operating since the 1970s in the Wingecarribee and Wollondilly local government areas. It is operated by Tahmoor Coal Pty Ltd (the Applicant). The mine directly employs nearly 400 people and is located between the townships of Tahmoor and Bargo, approximately 75 kilometres (km) south-west of Sydney. Coal is processed at existing surface facilities and transported by rail to the Port Kembla Coal Terminal.

1.2 Approval history

The Applicant currently operates under several development consents to extract up to 3 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal using longwall mining techniques. Approved mining operations under these existing development consents are anticipated to be completed by 2022.

On 23 April 2021, development consent for the Tahmoor South Project (SSD 8445) was granted by the Independent Planning Commission of NSW. The Tahmoor South Project development consent authorises:

- extraction and processing of up to 4 Mtpa of ROM coal via longwall mining methods, until 2032;
- transportation of up to 200,000 tonnes of material (including ROM coal, product coal and coal reject material) to and from the site by road in any calendar year; and
- transportation of coal to the Port Kembla Coal Terminal via the mine's rail loading facilities.

The Applicant has committed to surrender its older development consents once operations start under SSD 8445. Mining is expected to shift to the south (the area authorised under SSD 8445) in September 2022.

1.3 Tahmoor South Mine Water Management

The Applicant holds Environmental Protection Licence 1389 (EPL 1389) for the site. This EPL authorises surplus mine water and water from sedimentation basins to be discharged to Tea Tree Hollow from its licenced discharge point (LDP 1).

The EPL also includes a requirement to improve the treatment of water prior to release via Pollution Reduction Program (PRP) 22. This PRP involves the development and commissioning of a new reverse osmosis water treatment plant (WTP) to reduce concentrations of arsenic, nickel and zinc in mine water released from LDP 1.

The current Tahmoor water treatment plant was constructed in 2015 as a result of the PRP. Following continued performance issues, it was considered incapable of treating the mine water to the required quality.

To address the issues with the current Water Treatment Plant, EPL 1389 includes a two-stage special condition E1.1 which requires:

- a pilot water treatment plant to be installed and tested by 31 December 2021; and

- commissioning of the final water treatment plant to be completed prior to secondary coal extraction in the Tahmoor South area.

During assessment of the Tahmoor South Project mine the previous issues with the water treatment plant were considered, including the PRP and the requirements to improve the quality of discharged water. For consistency with the EPL conditions, the development consent for SSD 8445 includes Condition B30 which states:

“Prior to the commencement of second workings under this consent, the Applicant must commission the Water Treatment Plant required under Special Condition E1.1 of EPL 1389.”

A pilot water treatment plant was successfully completed in December 2021. Following this the Applicant finalised a contract (in the order of \$20 million) for design and construction of the final water treatment plant, with orders for equipment being placed with specialised overseas suppliers.

2 Proposed modification

On 22 March 2022, Tahmoor Coal Pty Ltd lodged a modification application pursuant to section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Applicant is seeking to allow secondary coal extraction to start before the commissioning of its new water treatment plant (see **Section 1.3**). The Applicant proposes that the new reverse osmosis water treatment plant would be commissioned by 31 December 2023.

Specialist components (i.e. reverse osmosis modules and pumps) for the new water treatment plant have been ordered from international suppliers. However, Covid-19 has caused heavy delays to international supply chains affecting the delivery of numerous components required for the new water treatment plant.

Mining at Tahmoor North is nearly complete, and mining operations are scheduled to move to Tahmoor South in September 2022.

These delivery delays would cause follow on delays to the installation and commissioning schedule, resulting in the new water treatment plant not being completed prior to starting second workings at Tahmoor South.

Water discharged from the site would continue to be treated by the existing water treatment plant, and would continue to meet the interim water quality limits set out in EPL 1389.

The Applicant has submitted a concurrent application to vary the conditions of its EPL.

Alternatives considered

The Applicant investigated whether it could hire an “off the shelf” water treatment plant to treat the mine water while the new water treatment plant is under construction. It also considered continuing to use the pilot plant. However, these alternatives are not feasible due to variability of the feed water quality and the specialised treatments required to reduce analyte thresholds, limitations in the volume of water that can be processed through the pilot plant, and the confined footprint of the water treatment plant location.

Delaying second workings at Tahmoor South until the new water treatment plant could be commissioned would result in a 15-month closure of the mine.

3 Statutory context

3.1 Scope of modifications

The Department has reviewed the scope of the modification application and considers that the application can be characterised as a modification involving minimal environmental impacts as the proposal:

- would not increase the environmental impacts of the project as approved;
- is substantially the same development as originally approved; and
- would not involve any further disturbance outside the already approved disturbance areas for the project.

Accordingly, the Department considers that the application should be assessed and determined under section 4.55(1A) of the EP&A Act rather than requiring a new development application to be lodged.

3.2 Consent authority

The Minister for Planning is the consent authority for the application under section 4.5(a) of the EP&A Act. However, the Director, Resource Assessments may determine the application under the Minister's delegation dated 9 March 2022 as no public objections were received, Wollondilly Shire Council and Wingecarribee Shire Council did not object to the proposed modification, and the Applicant did not disclose any reportable political donations.

3.3 Mandatory matters for consideration

The Department has considered the proposed modification against the provisions of the relevant State Environmental Planning Policies. The Department conducted a comprehensive assessment of the Tahmoor South project against the mandatory matters for consideration as part of the original assessment of SSD 8445. The Department considers this modification application does not result in significant changes that would alter the mandatory matters for consideration under section 4.15 of the EP&A Act and conclusions made as part of the original assessment.

3.4 Objects of the EP&A Act

The Department has assessed the modification against the objects found in section 1.3 of the EP&A Act and this assessment is provided in **Appendix B**.

4 Engagement

Section 105(4) of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) specifies that the notification requirements of the EP&A Regulation do not apply to section 4.55(1A)

modifications with minimal environmental impact applications. Accordingly, the application was not notified or advertised. However, it was made publicly available on the Department's website on 11 April 2022, and was referred to Wollondilly Shire Council, Wingecarribee Shire Council and Environment Protection Authority (EPA) for comment.

4.1 Summary of EPA advice and Council comments

The EPA noted its disappointment in the water treatment plant's delay but acknowledged that the shipping delays due to Covid-19 are beyond the Applicant's control. The EPA noted it is aware of similar delays at another underground coal mine. The EPA advised that the time extension could be granted provided a clear and unambiguous commitment was provided by the Applicant.

Wollondilly Shire Council acknowledged that the delays were outside of the Applicant's control. Council noted that the Mermaid Pools, a popular summer swimming site, is downstream of the mine's discharge point and raised concerns over the adequacy of the interim EPL water quality conditions following commencement of second workings. Following a meeting between the Department, Council and the Applicant, Council accepted the EPA's advice, given it is the regulatory authority.

A link to the full copy of the advice is provided in **Appendix A2**.

5 Assessment

The Department has assessed the merits of the proposed modification in accordance with the relevant objects and requirements of the EP&A Act.

The Department considers that the key matter in respect of this proposed modification is whether it is acceptable for the Applicant to continue discharging water to Tea Tree Hollow under the interim EPL water quality discharge limits, for an additional 16 months (i.e. September 2022 to December 2023), while its new water treatment plant is delayed.

The Applicant stated that water currently discharged from the site meets current interim EPL discharge conditions and has been discharged under these interim limits since 2015.

The Applicant has provided details surrounding its process to improve the quality of water discharged to Tea Tree Hollow (see **Appendix A2**), resulting in the design of a new reverse osmosis water treatment plant. The construction and commissioning of this new reverse osmosis water treatment plant is delayed due to Covid-19 shipping delays of specialist parts (see **Section 2**).

The Applicant has advised that due to site constraints and the complexities of treating the feedwater the only other alternative to this proposed modification would be to suspend mining operations until the new water treatment plant is operational.

The Department notes that the Applicant has been working to improve the quality of water discharged from the site for seven years. While the proposed modification would result in lower quality water being discharged for a further 16 months, the Department considers that, in the long term, this delay ensures that the new water treatment plant is fit for purpose and the previous issues and design limitations with the existing water treatment plant are avoided. The Department notes that EPL 1389 requires the new water treatment plant to meet ANZECC Guidelines for Aquatic Eco-systems limits, which are more stringent than ANZECC Guidelines for Recreational Waters.

It is important to note that the only viable alternative would be delaying mining at Tahmoor South. This would result in several economic impacts across the region and more broadly the state of NSW through the loss of 400 jobs at the Tahmoor Colliery, in-direct employment impacts on local businesses, loss of coal supply to Port Kembla steelworks, and State royalties.

The Department considers that continuing to discharge water within the interim EPL requirements for an additional 16 months would not result in more than a minimal environmental impact.

The Department notes that the Applicant is required to prepare a Water Management Plan that requires surface water quality performance criteria, and a monitoring program that identifies and evaluates compliance with the performance criteria. The Water Management Plan also requires Trigger Action Response Plans. These monitoring and management requirements would ensure that water discharged to Tea Tree Hollow would continue to meet the interim EPL requirements and that measures are in place to stop any further reduction in water quality.

The Department has recommended additional conditions requiring the Applicant to provide six monthly progress reports to track progress of the water treatment plant construction. The Department has also recommended a condition requiring the Applicant to provide progress updates and water quality monitoring data at its Community Consultative Committee meetings.

The Department is satisfied that approving an extension to commission the water treatment plant would not result in a greater impact above what is currently occurring at the site.

6 Evaluation

The Department has assessed the modification application in accordance with the relevant statutory requirements, having regard to the approved project, the documents provided with the modification application and advice received from the EPA.

The Department considers that reasonable efforts have been made by the Applicant to commission the new Water Treatment Plant prior to the commencement of second workings however, due to circumstances outside of the Applicant's control, this could not be achieved.

The Department recognises that the modification would have a minimal environmental impact and would result in the commissioning of a Water Treatment Plant that is a fit for purpose and able to treat water to meet the criteria based on ANZECC Guidelines for Aquatic Eco-systems for the remainder of mining operations at Tahmoor South.

The alternative is to delay mining at Tahmoor South for 16 months resulting in direct job losses and economic impacts across the region and more broadly the state of NSW.

The Department has carefully considered the likely impacts of the proposal on the environment and on balance, the Department is satisfied that the proposed modification is in the public interest and should be approved, subject to minor modifications to the existing conditions of consent.

The Department has drafted a Notice of Modification (see **Appendix C**) and a consolidated version of the development consent as modified (see **Appendix D**).

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 application SSD 8445 MOD 1 falls within the scope of section 4.55(1A);
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification
- **modify** the consent SSD 8445 and;
- **signs** the attached Notice of modification (**Appendix C**).

Recommended by:




Kristina Robinson

Environmental Assessment Officer
Resource Assessments

8 Determination

The recommendation is **Adopted** by:



19/07/2022

Jessie Evans

Director
Resource Assessments

as delegate of the Minister for Planning

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/modification-1-extension-commission-water-treatment-plant>

A2 – Agency Advice: Refer to folder “Additional Information” on the Department’s website at <https://www.planningportal.nsw.gov.au/major-projects/projects/modification-1-extension-commission-water-treatment-plant>

Appendix B – Statutory considerations

Objects of the EP&A Act

The approval authority must consider the objects of the EP&A Act when making decisions under the Act. The Department has assessed the proposed modification against the relevant objects of the Act and considers that the proposal can be undertaken in a manner that is consistent with these objects, as summarised in **Table B** below.

Table B | Consideration of relevant objects of the EP&A Act

Objects of the EP&A Act (section 1.3)	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;	<ul style="list-style-type: none">• The proposed modification would provide social and economic benefits through continued employment, use of local suppliers and contractors and through the supply of coal to Port Kembla.• There is no change to the approved recovery of coal resources.
(b) to facilitate ecologically sustainable development (ESD) by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;	<ul style="list-style-type: none">• The Department’s assessment has sought to integrate all significant environmental, social and economic considerations, refer Section 5.• The Department considers that the Project can be carried out in a manner that is consistent with the principles of ESD.

Objects of the EP&A Act (section 1.3)**Consideration**

(c) to promote the orderly and economic use and development of land;

- The Project involves an approved underground coal mining operation.
- The Department considers that this continues to represent an orderly and economic use of land.

(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;

- The Department considers that the Project avoids and minimises, to the greatest extent practicable, impacts on threatened species and communities and key habitats.
- The Department has recommended conditions to ensure that the impacts of the Project would be appropriately managed (see Section 5).

(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);

- The Department considers that the modification is unlikely to significantly impact cultural heritage or historic heritage values.

(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State;

- The Department has led a whole-of-government assessment of the Project in consultation with other NSW Government agencies. This consultation process is discussed further in Sections 4 and 5.

(j) to provide increased opportunity for community participation in environmental planning and assessment.

- The Department consulted with the EPA and Wollondilly Shire Council and Wingecarribee Shire Council during its assessment of this modification.
- The Department made the modification report publicly available on its website.

SEPP (State and Regional Development) 2011

The approved Project was classified as State significant development under Schedule 1 of the SEPP (State and Regional Development) 2011 as it is for the purposes of coal mining (Clause 5(1)(a) of Schedule 1 of the SEPP).

SEPP (Mining, Petroleum Production and Extractive Industries) 2007

The key aims of the Mining SEPP include:

*(a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and
(b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources*

The Project is considered permissible with consent pursuant to clause 7 (1) (a) of the Mining SEPP because it involves development for the purposes of '*underground mining carried out on any land*'.

The Project extends across the Wollondilly and Wingecarribee LGAs, although it is located within the Wollondilly LGA only, on land subject to the Wollondilly LEP 2011. The Mining SEPP prevails over the Wollondilly LEP 2011 and the Project is permissible with consent pursuant to the Mining SEPP on the Project Area within the LGA.

The proposed modification would enable the extraction of an established coal resource and would allow the continued production of coal providing economic and social benefits for the Illawarra and Greater Sydney regions, including continued employment of nearly xx staff.

Clause 12 of the Mining SEPP requires the consent authority to consider the compatibility of the proposal with existing and approved land uses in the vicinity.

The existing land uses in the vicinity of the proposed modification are the existing Tahmoor Coal Mine that has operated in the area for over 30 years,

The proposed modification does not change the existing environmental assessments.

SEPP No. 33 – Hazardous and Offensive Development

The proposal does not meet the definition of hazardous or offensive development in accordance with SEPP 33 as it would not pose a risk to human health, life or property and to the biophysical environment.

The Project is subject to strict operating conditions to ensure the biophysical impacts are minimised to acceptable and established standards.

State Environmental Planning Policy No. 44 – Koala Habitat Protection

This Policy requires a consent authority to consider whether land subject to a development application is classified as potential koala habitat and/ or core koala habitat.

The Project area is not considered to represent Core Koala habitat as defined by SEPP 44 and would not require the preparation of a plan of management in accordance with clause 9 of SEPP 44. The Applicant is required to offset potential koala impacts through existing conditions of consent.

The proposed modification does not result in any change to the currently approved disturbance area, or approved vegetation clearance.

SEPP 55 – Remediation of Land

The object of this Policy is to provide for a Statewide planning approach to the remediation of contaminated land. The proposed extraction area is not contaminated land, and therefore SEPP 55 does not govern the modification application.

State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011

This SEPP requires that developments carried out on land in the Sydney drinking water catchment incorporate WaterNSW's current recommended practices and standards.

The Project area covers the Metropolitan Special Area, however, no elements of the Project (including any longwalls or surface infrastructure) extend into the Metropolitan Special Area. The Project would not be carried out on land designated as Sydney drinking water catchment.

The proposed modification does not result in the Project extending into the Metropolitan Special Area.

Wollondilly Local Environmental Plan 2011 (WLEP 2011)

The Department has considered the aims of the WLEP 2011, as well as the objectives of the relevant zones and other relevant provisions of the Plan in its assessment.

The aims of the WLEP 2011 are to encourage a range of development that promotes and protects arts and cultural activity, landscape and Aboriginal cultural heritage, manages and protects natural resources, including landscape character, sustainable agriculture and extractive industries, provides infrastructure and services for future growth, provides a built environment that contributes to the health and well-being of its community, protects water quality, and allows towns and villages to retain their unique character and rural and natural settings.

The Project area covers several land use zones. The Surface Facilities Area and Reject Emplacement Area are zoned RU2 Rural. The longwall mine plan extends beneath land zoned primarily E2 Environmental Conservation, E4 Environmental Living, RU1 Primary Production, RU2 Rural Landscape and RU4 Rural Small Holdings. The footprint of the mine plan also includes areas of Low and Medium Density and Large Lot Residential (R2, R3 and R5, respectively), and SP2 Infrastructure (Road and Railway). The Project constitutes activities that are ordinarily permitted with consent in some of these land use zones (RU4), and prohibited in others (RU1 and RU2, for example) under the Wollondilly LEP 2011, however, the Project is permissible pursuant to the provisions of the Mining SEPP.

The Department consulted with Wollondilly Shire Council during its assessment of this modification. The Department is satisfied that the proposed modification is consistent with the WLEP 2011.

Appendix C – Notice of Modification

<https://www.planningportal.nsw.gov.au/major-projects/projects/modification-1-extension-commission-water-treatment-plant>

Appendix D – Consolidated Consent

<https://www.planningportal.nsw.gov.au/major-projects/projects/modification-1-extension-commission-water-treatment-plant>