



Tahmoor Coal Community Consultative Committee

Annual Report 2022

Community Consultative Committee Details

CCC / Project Name:	Tahmoor Coal Community Consultative Committee	Reporting Period:	January to December 2022
Independent Chairperson:	Michael Muston	Proponent Contact:	qem@1earth.net

1. Executive Summary

Tahmoor Coal Community Consultative Committee (TCCCC) Meetings throughout 2022 were again to some extent impacted by COVID-19. All of the scheduled meetings for 2022 proceeded as face to face meetings but some committee members and Tahmoor Coal staff attended the first three meetings online via Microsoft Teams.

TCCCC key commitments for 2022 were the completion of longwall operations in the Western Domain and commencement of mining in the Tahmoor South Domain mine expansion; along with monitoring and remediation works in Myrtle Creek and Redbank Creek and the installation commencement of a Reverse Osmosis (RO) treatment plant to reduce heavy metal discharges from the mine site.

Western Domain

- Longwall West 3 commenced on 14 September 2021 with excellent performance including daily and weekly production records and was completed on 21 March 2022.
- Longwall West 4 (the final longwall in the Western Domain) was shortened due to difficult geotechnical conditions in development roadways. It commenced on 16 May 2022 and was completed on 13 September 2022.
- Recovery of equipment from Tahmoor North for future use in Tahmoor South, will be ongoing until around March 2023, when final sealing of Tahmoor North will occur.

Tahmoor South Domain

Development mining in Tahmoor South Domain commenced and secondary extraction approval was granted by Department of Planning and Environment (DPE) on 20 September 2022 for six longwalls called the A series. Longwall South 1A (S1A) commenced extraction on 18 October 2022.

Several major projects are required as condition of consent for Tahmoor South approval:

- Noise mitigation:
 - Noise surveys to form base lines for the site and surrounding areas have been completed.

- Progressing with the design and installation of required noise reduction works including covers to the stockpile dozers, Coal Handling Preparation Plant (CHPP) noise reduction installation of noise dampening cladding and closure of openings on the external CHPP walls.
- Vent shafts:
 - A ventilation review was undertaken and determined that no new ventilation shafts are required for Tahmoor South. The continued use of existing shafts means the clearing of Critically Endangered Ecological Communities – Shale Sandstone Transition Forest is now not required.
- Gas drainage plant upgrade:
 - This will optimise gas capture, reduce Greenhouse Gas emissions, and provide an opportunity for Tahmoor to reduce or eliminate the use of electricity from the grid through expansion of the gas-powered electricity generation plant. Tahmoor Coal has commenced capital works to increase the capacity of the Gas Drainage Plant to maximise gas extraction from the underground workings and plant capacity to 6,000L/s (3,000L/s currently) to enable increased electricity generation capacity. A contract has been awarded to CS Gas and work has commenced.
- Mine site entrance:
 - Construction commenced in May 2022 including localised drainage and widening work, re-surfacing of the pavement. Works were completed in June 2022.
- Sewage Treatment Plant:
 - Commissioned in September 2022.
- Secondary extraction commenced in October 2022 for A-Series Longwalls. Document preparation was completed for the following:
 - Extraction Plan main document
 - Water Management Plan
 - Biodiversity Management Plan
 - Land Management Plan
 - Heritage Management Plan
 - Built Features Management Plan
 - Public Safety Management Plan
 - Subsidence Monitoring Program

Remediation of Myrtle Creek and Redbank Creek

Myrtle Creek:

- Schedule for 7 pools and associated rock bars were approved by the NSW Resources Regulator with 4 pools completed at the commencement of the year and the 3 remaining pools completed by August 2022.
- The remediation strategy for each pool involved a wide curtain wall to a depth and width determined from geotechnical investigations.

- Generally, there is a four-stage process including shallow curtain wall to approximately 2m and deeper curtain wall in 6m increments (depending on conditions at each site) with each site planned based on investigative drilling.
- Completed pools have been holding water since the completion of the remediation works (previously holding water for only a short time after major rain events).
- Ongoing surface and groundwater monitoring continue to assess effectiveness of remediation works.

Redbank Creek:

- A schedule for 15 pools and 6 rock bars was approved by the NSW Resources Regulator and remediation of 12 pools and 3 rock bars were completed by December 2022.
- Rock bar 4 was completed in early 2022 and rock bar 5 remediation works were commenced during 2022.
- The remaining two pools and two rock bars have commenced and are planned to be completed in 2023.
- Ongoing surface and groundwater water monitoring was undertaken for both creeks to assess the effectiveness of the remediation. The spring Aquatic Survey was undertaken with the report still to be completed.

Waste Water Treatment Plant

TCCCC monitored plans for the treatment of heavy metals (Ni, As, Zn, Cu, N, Al and EC) from discharge water from the mine site. The previous wastewater treatment plant was not successful and has required considerable investigation to find an alternative treatment option. A contract was awarded to IXOM for a Reverse Osmosis Treatment Plant in December 2021.

Delivery times of specialised equipment have encountered considerable delays. For example, Reverse Osmosis modules and pumps which are sourced from overseas were originally expected as a six-month delivery and have now been extended to 10 months for delivery due to supply chain issues (COVID-19).

These delays have lengthened the overall installation schedule. Orders have been placed for long lead time items.

The project team are reviewing the manufacturing and installation schedules to attempt to mitigate delays and to determine if any pre work can be achieved early. They have investigated “off-the-shelf” hire plant that can treat the feedwater with the current analyte concentrations to meet the nominated discharge limits for Tahmoor South and found that such hire plants do not exist. Commissioning is currently forecast to be December 2023.

Variation to consent was submitted to DPE to allow Tahmoor Coal to continue discharging water via the licenced discharge point under current interim EPA licence conditions until the WWTP is commissioned.

TCCCC continued to monitor the ongoing research into Thirlmere Lakes

A four-year Thirlmere Lakes Research Program which began in 2017, led by DPE was published in 2022. Department scientists collaborated with research partners at the University of NSW (UNSW), University of Wollongong (UoW) and Australian Nuclear Science and Technology Organisation (ANSTO). The research program provided a more

detailed understanding of the dynamics of water sources and water flow paths in Thirlmere Lakes by investigating the geology, geomorphology, hydrogeology and hydrology of the system.

As well as looking at the internal dynamics of the system, researchers investigated the sensitivity of these wetland systems to external influences, including looking for evidence of the potential effects of mining activity and groundwater extraction.

Among the key findings the research found no direct links between the drying of Thirlmere Lakes and the nearby Tahmoor Coal mine but could not rule out a smaller (relative to climate) impact on water levels from mining.

Changes to the TCCCC membership occurring during the year:

- Following the local government elections in 2021, Wollondilly Shire Council representatives appointed to the TCCCC were Cr Paul Rogers with Cr Michael Banasik as alternative representative. The TCCCC thanked former Mayor Robert Khan for his previous service to the TCCCC as a Wollondilly Shire Council representative.
- Ana Gracanin resigned from the committee in June 2022 as she relocated out of area for a work opportunity.
- Expressions of interest were sought for new members to join the TCCCC with advertisements placed in local newspapers and notice boards, with the appointment of two new members pending.

2. TCCCC activities over last 12 months

The TCCCC met on four occasions in 2022. Membership of the committee is:

- Michael Muston - Independent Chairperson
- David Auchterlonie - Community Representative
- Col Mitchell - Community Representative
- Robert Clayton - Community Representative
- James Johnson - Community Representative
- Ana Gracanin - Community Representative (to June 2022)
- Paul Rogers - Wollondilly Shire Council Representative
- Michael Banasik - alternative Wollondilly Shire Council Representative
- David Henry - Wollondilly Shire Council Representative
- Peter Vale - Tahmoor Coal Representative
- Zina Ainsworth - Tahmoor Coal Representative
- Amanda Bateman - Tahmoor Coal Representative

A summary of the meeting dates and attendance is in the following table.

Attendance	3 March 2022	2 June 2022	1 September 2022	1 December 2022
Michael Muston	Attended	Attended	Attended	Attended
David Auchterlonie	Apology	Attended	Attended	Attended
Col Mitchell	Attended	Apology	Attended	Attended

Paul Rogers	Attended	Apology	Apology	Apology
Michael Banasik	Attended	Apology	Apology	Attended
David Henry	Attended	Attended	Attended	Ibrahim Muharrem alternative rep.
Ana Gracanin	Attended	N/A	N/A	N/A
Robert Clayton	Attended	Attended	Attended	Attended
James Johnson	Attended	Apology	Attended	Attended
Peter Vale	Attended	Attended	Attended	Attended
Zina Ainsworth	Attended	Attended	Apology	Attended
Amanda Bateman	Apology	Attended	Attended	Attended

Meeting minutes for 2022 are available on the [Tahmoor Coal website](#).

3. Key issues

The following is a summary of the key issues raised by the TCCCC throughout the year and any actions taken to respond to these.

Issue	Actions Taken	Next Steps
Tahmoor South Domain mining commencement	Monitoring of progress on Tahmoor South Domain and any community concerns.	First workings commenced in mid-2022 and Longwall S1A commenced in October 2022. The TCCCC continues to monitor any community concerns raised and the implementation of management plans required as part of the approval process.
Western Domain mining	TCCCC monitored progress of the approved Western Domain longwalls which commenced in late 2019 and were completed in September 2022 as well as any ongoing environmental or subsidence issues that arise.	Mining was completed September 2022. TCCCC was updated at each meeting on the progress and results of ongoing monitoring of creeks, rail infrastructure and heritage items including a number of sensitive indigenous sites.
Myrtle Creek and Redbank Creek subsidence cracking	Monitoring of remediation work in Redbank Creek and review of monitoring results for Myrtle Creek and Redbank Creek subsequent to the rehabilitation of some pools.	TCCCC was given regular feedback on the progress of rehabilitation in both creeks as well as monitoring results.
Progress on the proposed Wastewater Treatment Plant	Monitoring of the proposed Reverse Osmosis Treatment Plant.	Monitor the progress of installation and commissioning of the of the Reverse Osmosis Treatment Plant.

4. Focus for next 12 months

- Monitor progress of the Tahmoor South Domain A-Series longwall extraction.
- Continue monitoring of the remediation of Myrtle Creek and Redbank Creek.

- Continue to monitor the closure of the Western Domain mining operations.
- Continue to monitor progress of the Reverse Osmosis Wastewater Treatment Plant for the treatment of heavy metals and disposal of generated brine.
- Continue to monitor community concerns.

Signature of Chair:	M H Muston
Date:	20/3/2023