



SIMEC

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Tahmoor South Project Information Booklet

| Mining

Tahmoor Coking Coal Operations

Tahmoor Coking Coal is an underground coal mine that began operations in 1979. The Mine has approval to produce up to three million tonnes of Run of Mine (ROM) coal per annum.

We are currently seeking approval for the extension of mining operations through the Tahmoor South Project.

Coal is mined from within the Bulli seam, producing hard coking coal for steel production. Product coal is transported via rail to Port Kembla for Australian domestic customers and export customers.

Tahmoor Coking Coal currently employs more than 400 employees and contractors. The operation supports many local and regional businesses and services.

Tahmoor Coking Coal is a proud supporter of local charities and service organisations through its sustainable development program and sponsorships.

Snapshot of proposed Tahmoor South mine plan



Largely removed mining activity from the Bargo township



An 80 % reduction of mining activity under housing



Maintain 400 jobs until 2032 and create 150 new jobs



Inject \$137.5 million into the local economy



Continued stable employment in the region



Reduced impact to native vegetation and water sources

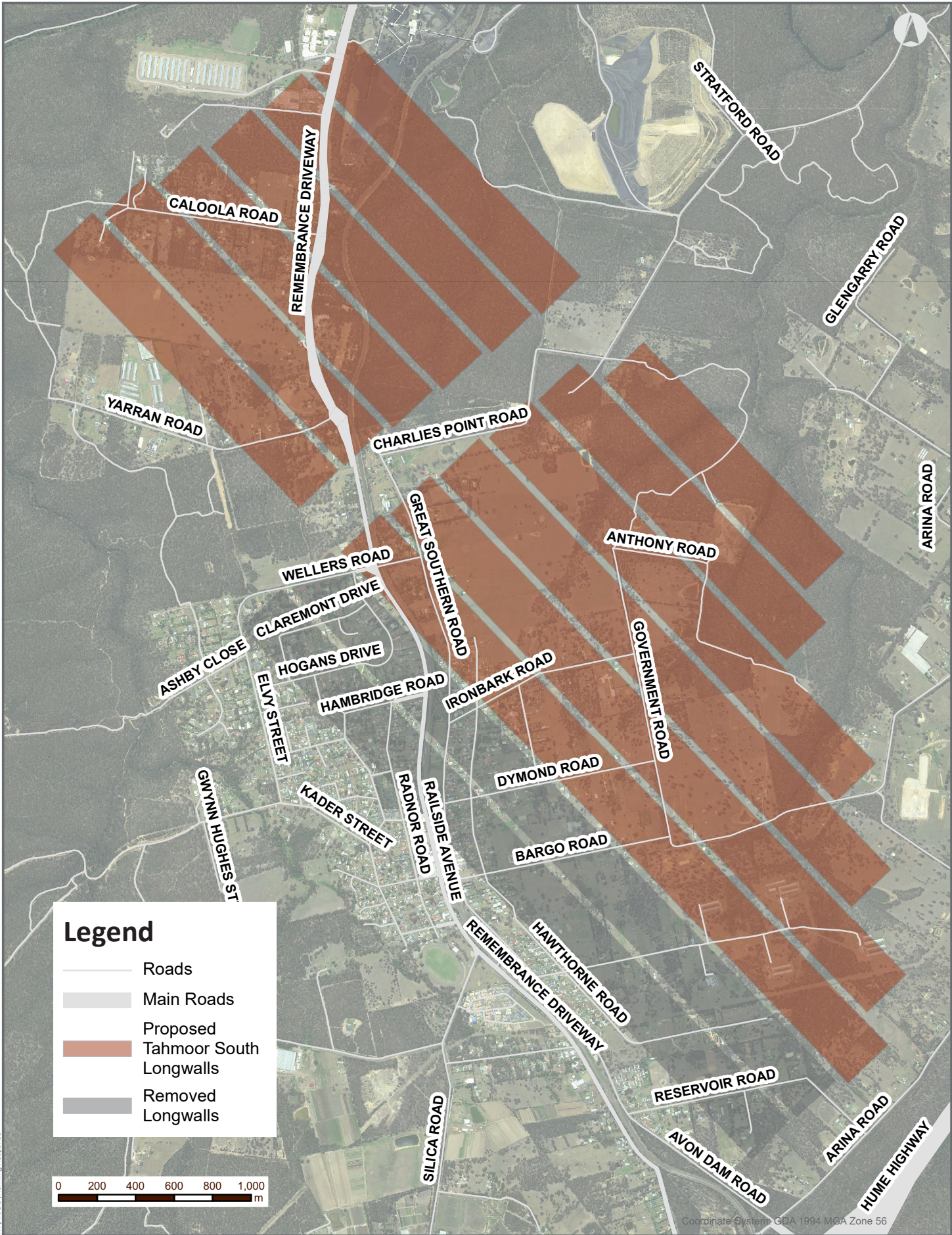


Continuing participation in community initiatives



Continuing partnerships with local schools, businesses and sporting teams





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Proposed Tahmoor South Mine Plan



Date: 7/08/2020

Data Sources:
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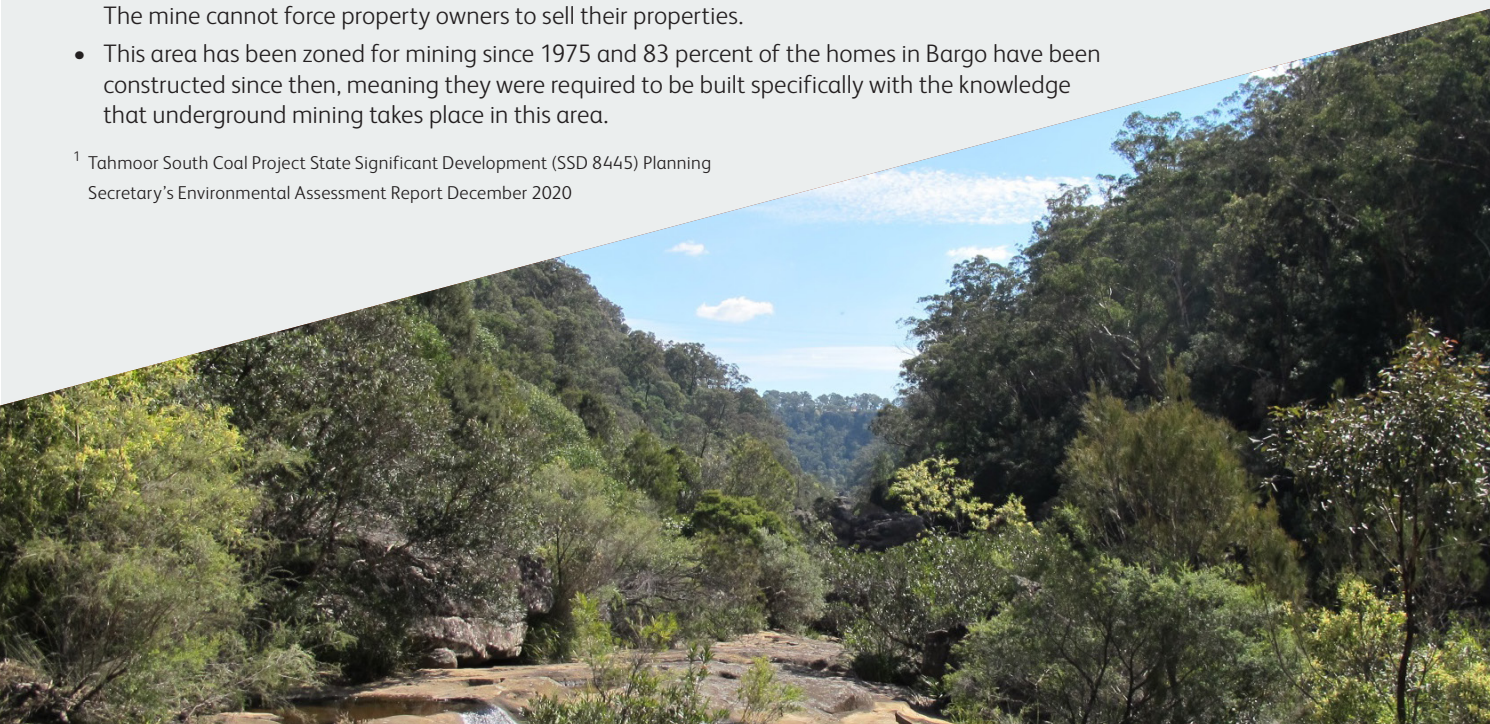
Where are we at?

- The Department of Planning, Industry and Environment (DPIE) has recommended the Independent Planning Commission approve the project based on ‘a reasonable balance between maximising the recovery of a coal resource of State significance and minimising the potential environmental and amenity impacts’.
- As Wollondilly Shire recovers from bushfires and the impacts of COVID, this project will secure the jobs of more than 400 workers and create a further 150 job opportunities.
- If it is not approved, mining will cease in about 18 months, meaning these jobs and our support for local suppliers and businesses including cafes, restaurants, fuel stations and retailers will be lost to the local community.
- We will continue to support community groups and initiatives, including a proposal to provide more than \$3 million to upgrade Bargo Sportsground.
- Importantly, it means our workers can continue to live, work and raise their families in a community they – and we – are proud to be part of.

Subsidence snapshot (more detailed information in this booklet)

- The mine plan the DPIE recommended for approval saw homes being directly mined beneath reduced by 80% (751 to 143) from the original plan, reducing the risk of potential subsidence.
- In its assessment report, the Department acknowledged “*the potential impacts of the Project on houses, but is satisfied that a well-established regulatory and compensatory framework exists, which has been successfully implemented at other underground mines in the region to ensure houses are appropriately maintained and restored to a condition equal to or better than their pre-mining state at no financial cost to owners.*”
- Projections show 90% of homes in the subsidence study area are predicted to require nil to very minor repairs¹.
- Subsidence Advisory NSW (SA NSW) which manages the Coal Mine Subsidence Compensation Act 2017 (CMSC Act) process, advises on its website, “*signs of damage from mine subsidence can range from hairline cracks and jammed doors and windows to more significant structural issues. Generally, buildings damaged by mine subsidence remain safe and can be used until they are repaired.*”
- Your rights are protected under the CMSC Act and you can claim compensation from the mine through SA NSW which will also provide support to residents throughout the process to ensure claims are dealt with in accordance with the CMSC Act.
- There will be no compulsory acquisition of properties from mine subsidence impacts. The SA NSW Guidelines outline the process for property purchases where an owner chooses to sell their property to the mine if significantly impacted from subsidence. The mine cannot force property owners to sell their properties.
- This area has been zoned for mining since 1975 and 83 percent of the homes in Bargo have been constructed since then, meaning they were required to be built specifically with the knowledge that underground mining takes place in this area.

¹ Tahmoor South Coal Project State Significant Development (SSD 8445) Planning Secretary’s Environmental Assessment Report December 2020



Longwall Mining

Coal is extracted at Tahmoor Coking Coal by a longwall shearer and transported to the surface by a series of conveyors. A schematic diagram of longwall mining typical at Tahmoor Coking Coal is shown in Figure 1.

The area immediately in front of the coal face is supported by a series of hydraulic roof supports, which temporarily hold up the roof strata and provides a working space for the shearing machinery and the face conveyor. After each slice of coal is removed, the hydraulic

roof supports, the face conveyor and the shearing machinery is moved forward.

When coal is extracted using this method, the roof immediately above the seam is allowed to collapse into the void that is left as the face retreats. This void is referred to as the goaf. As the roof collapses into the goaf behind the roof supports, the overlying strata fills the void which may lead to subsidence of the surface area above.

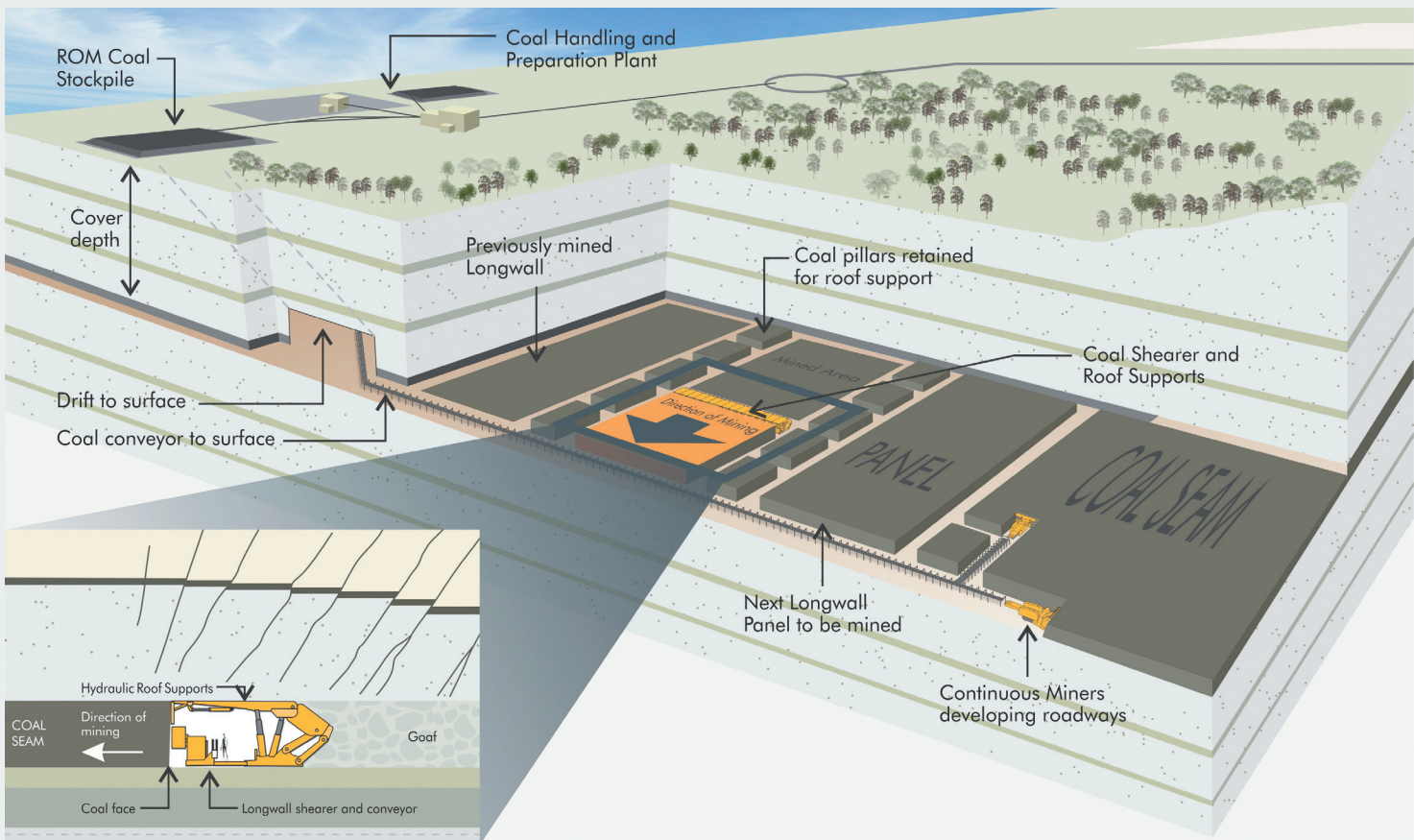


Figure 1: Schematic diagram of longwall mining

Possible Impacts on Houses & Other Structures

Vertical subsidence is the lowering of the land and the buildings on it. If a whole building lowers by the same amount, it has little or no effect on the building itself. Vertical subsidence varies from very small amounts (less than 20mm) more than 250m away from a mining area, to a maximum of about 1600mm near the middle of a longwall.

These changes result in slight tilting and bending of the land and the buildings on it, as well as stretching and compressing.

These changes develop very gradually over many weeks, and they are not readily apparent to the naked eye.

The variation in subsidence movements does at times result in impacts to houses and other structures, mainly in the forms of cracks. The way a structure has been designed and built (for example, wooden house on piers or double brick on a concrete slab) will determine what impact subsidence may have on a structure.

What is Subsidence?

Mine subsidence refers to any surface ground movements associated with underground mining. Typically, mine subsidence refers to a vertical movement at a particular point. This occurs when material is removed from an underground mine and the earth above the mine adjusts to the altered landscape. Figure 2 below demonstrates a cross view of mine subsidence effects.

The amount of subsidence varies across the area mined beneath, with greatest subsidence occurring towards the centre of the mined area, and gradually reducing to outside the mined area. If subsidence occurs uniformly across an area, it is unlikely that any impacts would be noticed. However, differential subsidence results in tilting and bending of the ground. These differential movements can result in mine subsidence-related impacts to surface features.

Mine subsidence commonly also results in horizontal movements. Differential horizontal movement causes ground strain. Small horizontal movements may be experienced at points on the surface that are some distance away from the mining activity.

Types of Subsidence

Mine subsidence movements can be described using the following parameters:

Vertical Subsidence – this is the lowering of the land and all surface infrastructure. If the infrastructure lowers by the same amount, it would have little or no effect on the structure, unless it is located in a flood prone area. Subsidence develops very gradually, and it is not readily apparent.

Tilt – a small change of slope on the surface arising from the surface lowering unevenly. Generally tilt does not lead to structural damage.

Strain – the tensile stretching or comprehensive squeezing of the land surface as it lowers to the new level, relative to the land surrounding it.

Curvature – the bending of the land surface as it lowers to the new level.

What does this subsidence mean at the surface?

Subsidence can result in a change to surface and sub-surface conditions. The effects of subsidence may not be noticeable because the undulation of the natural surface is much greater and tends to mask subsidence movements.

The level of impact that can occur to surface and sub-surface features depends on the magnitude of movement that occurs, and the sensitivity of each feature to these movements. Movements that are sensitive to one feature might easily be accommodated by another. Some features, such as houses, can be sensitive to ground tilt, curvature and strain.

Regulations

Mine subsidence is regulated by the NSW Government through Subsidence

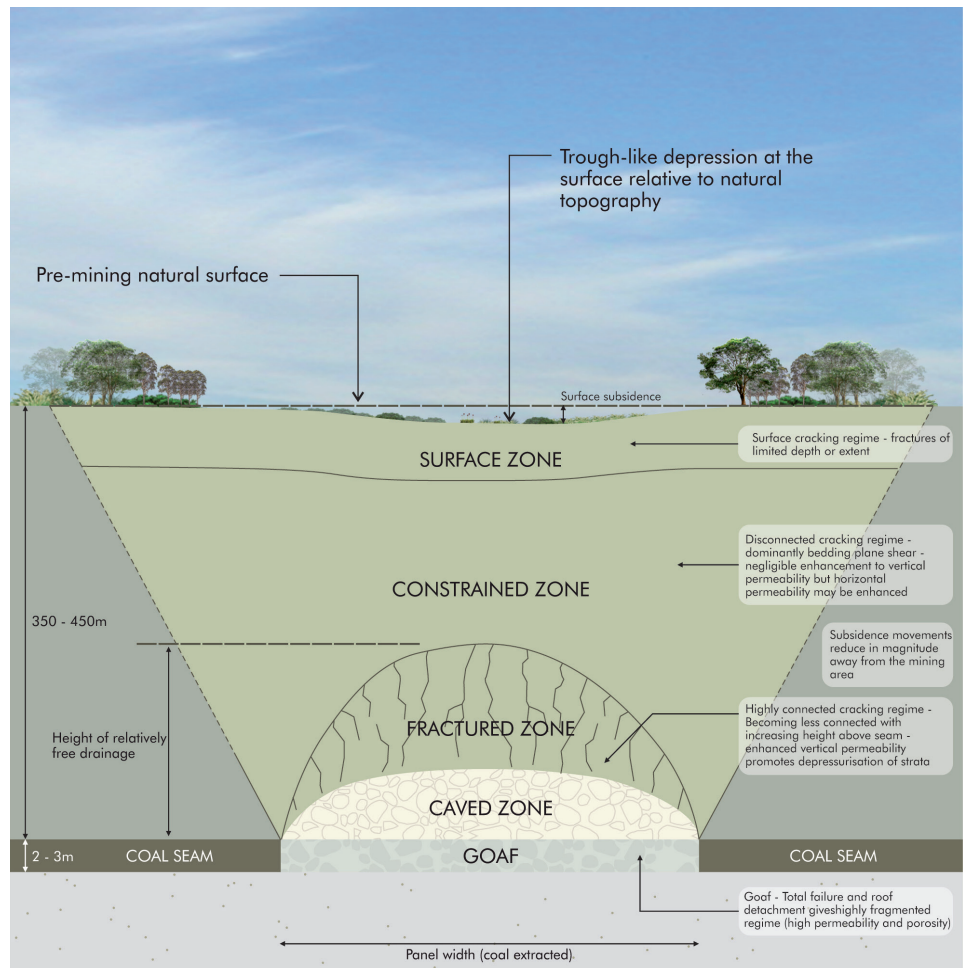


Figure 2: Cross view mine subsidence effects

Advisory NSW. Extraction Plans must be prepared and approved, outlining what management techniques will be used to keep impacts within acceptable levels.

Many government agencies are involved in the approval of a Extraction Plan including the NSW Department of Planning, Industry & Environment. This provides a whole-of-government approach, which allows all mine subsidence related issues to be considered in the process.

Subsidence Management

Potential impacts from subsidence

have been successfully managed by Tahmoor Coking Coal for many years, including the Main Southern Railway, Picton Industrial Area, houses, shops, and infrastructure such a water, gas, power and telecommunications infrastructure. Subsidence can be managed in a number of ways, including;

- Mine Design;
- Pre-mining strengthening works;
- Monitoring during mining; and
- Post subsidence remediation works.

Claiming compensation for subsidence damage

If your home or structure is impacted as a result of subsidence your rights are protected under the *Coal Mine Subsidence Compensation Act 2017*.

An overview of the claims process is shown in Figure 3 below.

Subsidence Advisory NSW's new online portal

SA NSW has launched a new online portal for end-to-end management of claims, building and subdivision applications. You can use the portal to lodge, track and manage compensation claims for subsidence damage and applications to build or subdivide in mine subsidence districts. Find out more at www.subsidenceadvisory.nsw.gov.au



Figure 3: Mine Subsidence Claims Process

Under the Mining Act, 1992 Tahmoor Coking Coal is responsible for providing compensation to property owners for “compensable loss” (with the exception of compensation covered by the CMSC Act). This means that Tahmoor Coking Coal has the responsibility for providing compensation under the Mining Act for impacts caused by mining within the Tahmoor Mining Leases upon property features that are not man-made. These features can include but are not limited to:

- Surface of the land;
- Crops, trees, grasses and other vegetation;
- Stock;
- Other business usage; and
- Surface drainage.

There is an appeal process in the event that there is disagreement in respect of this to the NSW Land and Environment Court.

Subsidence Advisory NSW

www.subsidenceadvisory.nsw.gov.au

Picton Office

99 Menangle Street, Picton NSW 2571
PO Box 40, Picton 2571

Phone 02 4677 6500

Hours 8.30am-4.30pm Mon-Fri

24 Hour Emergency Call

1800 248 083

Subsidence Advisory NSW

Subsidence Advisory NSW (SA NSW) is the NSW Government Agency responsible for administering the *Coal Mine Subsidence Compensation Act 2017*. SA NSW has two core functions:

1. To provide compensation or manage the provision of compensation where surface developments are damaged by mine subsidence following extraction of coal or shale in NSW; and
2. To regulate surface development within mine subsidence districts to reduce the risk of mine subsidence damage.

SA NSW provides expert advice to property owners, government departments, councils, community organisations and industries within coal mining areas of NSW. This advice aims to provide compatibility between surface development and underground mining.

Changes to the Mine Subsidence Compensation Act 1961

Changes to the mine subsidence system in NSW took effect from 1 January 2018 following a review of the former *Mine Subsidence Compensation Act 1961*. The changes make the mine subsidence compensation processes easier for property owners and provide a more equitable model for mining.

Pre-mining inspection

Tahmoor Coking Coal encourages property owners in areas where underground mining is planned in the near future to have a Pre-Mining Inspection (PMI) carried out on their property.

PMIs are free of charge and facilitate a straight forward claims process if a property is impacted by subsidence.

The purpose of a PMI is to determine the condition of a property prior to mining. PMIs are an added protection for property owners to ensure they receive adequate compensation to return their property to its pre-mining condition should it be impacted by subsidence.

The inspector undertaking the PMI will document the condition of the property using photographs and survey levels. Once completed property owners are given a copy of the PMI detailed report. This report can be used as a reference to identify potential damage once mining has occurred.

How to request a pre-mining inspection and a Property Hazard Inspection

To request a PMI and/or a Property Hazard Inspection simply contact Tahmoor Coking Coal. An inspection time will then be arranged.

Property Hazard Inspection

The *Work Health and Safety (Mines) Regulations 2014*, in relation to subsidence, requires Tahmoor Coking Coal to identify and control hazards that may cause harm to people from subsidence. Tahmoor Coking Coal's risk management process includes hazard identification via a preliminary risk screening process that involves visual inspection of each property within the active subsidence area from publicly accessible viewpoints and a more detailed property hazard inspection, where the consent of the property owner is provided.

Tahmoor Coking Coal offers all property owners within the active subsidence area, a free property hazard inspection that will be undertaken by a qualified structural engineer.

Subsidence Damage

The signs of mine subsidence damage to buildings and other structures can range from cracking to walls and jammed doors to more significant structural issues. Generally, buildings damaged by mine subsidence remain safe and serviceable until they are repaired.

The extent of damage will vary depending on the location of the building in proximity to the mine workings and other subsidence related factors.

Duty to Disclose

Impacts to property improvements are covered by the *Coal Mine Subsidence Compensation Act 2017*, however, please consult with your insurance agency and mortgagee to determine if you have an obligation to disclose to them that mining will occur beneath your property.

Subsidence Monitoring and Management

Tahmoor Coking Coal has previously directly mined beneath or adjacent to more than 1,900 houses and civil structures, commercial and retail properties, the Main Southern Railway and local roads and bridges. Tahmoor Coking Coal has implemented extensive measures prior to, during and after mining to ensure that the health and safety of people have not been put at risk due to mine subsidence. Management strategies for the successful mining beneath structures include:

- Regular consultation with the community before, during and after mining;
- Site-specific investigations for identified properties;
- Implementation of mitigation measures as suggested by specialist engineers;
- Ground surveys along streets; and
- Detailed visual inspections.

Tahmoor Coking Coal has engaged a team of specialists to visually inspect, monitor and survey surface and below surface infrastructure to not only ensure there is no risk to public safety but also monitor change and discuss any concerns residents may have. Our dedicated team includes:

- Mine Subsidence Engineers;
- Structural Engineers;
- Geotechnical Engineers;
- Environmental Specialists;
- Surveyors; and
- Building Inspectors.

A free confidential counselling service is available for residents impacted by mining. For further details please contact Tahmoor Coking Coal **1800 154 415**.

Frequently Asked Questions

How do I find out when mining is occurring near my property?

To receive regular mining updates please contact Tahmoor Coking Coal to be placed on our contact database.

What if I am a tenant?

If you are a tenant, please make sure you keep your landlord or managing agent informed if you notice any changes to your property that may be from mine subsidence.

Alternatively, if you receive information regarding your property from either Tahmoor Coking Coal or the SA NSW and you are a tenant please forward the information onto your landlord or managing agent.

It is important that not only the tenant receives information, but the owner and / or managing agent is also kept informed about mining operations.

What are the advantages of a pre-mining inspection?

The purpose of a PMI is to determine the condition of a property prior to mining. PMIs are an added protection for property owners to ensure they receive adequate compensation to return their property to its pre-mining condition should it be impacted by subsidence.

How do I arrange a pre-mining inspection?

To request a PMI simply contact Tahmoor Coking Coal. An inspection time will then be arranged with you.

What if I don't have access to the internet or a computer to lodge a claim online?

SA NSW will continue to accept claims for compensation and development applications in hardcopy. You can lodge hardcopy applications with SA NSW over the counter at its Picton office or via post.

Who manages my claim?

All claims are managed by a SA NSW Case Advisor who will provide property owners with focused support and a dedicated point of contact throughout the process.

How to stay in touch & up to date with the latest information

Contact Us: 02 4640 0100 (within office hours)
1800 154 415 (after hours)

Email: tahmoorenquiries@simecgfg.com

Web: www.tahmoorcoal.com.au
www.tahmoorsouth.com.au

Tahmoor Coal Environment and Community team:

- Zina Ainsworth
Environment & Community Manager
- Amanda Francis
Community Liaison Specialist
- David Talbert
Project Manager
- April Hudson
Approvals Specialist

Emergency Numbers

Fire 000

Ambulance 000

Police 000

Gas 131 909

Electricity 131 002

Sydney Water 131 090

Telstra 132 203

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T: (02) 4640 0100 E: tahmoorenquiries@simecgfg.com W: www.tahmoorcoal.com.au

SIMEC Mining Site Address: 2975 Remembrance Drive, Bargo | Postal Address: PO Box 100, Tahmoor NSW 2573, Australia



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