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Mr Andrew Rode
Senior Environmental Assessment Officer
Resource Assessments | Planning Services
NSW Department of Planning and Environment

Via email: Andrew.Rode@planning.nsw.gov.au

Dear Mr Rode

Tahmoor South Coal Project (SSD 8445)

I refer to the email from the Department of Planning and Environment dated 16 January 2019 inviting comment on the Tahmoor South Coal Project proposal (SSD 8445).

Subsidence Advisory notes the proposal involves:

- extension of existing underground mining areas towards the Township of Bargo
- extraction, processing and rail transportation of up to four million per annum ROM coking and thermal coal
- expansion of the existing rejects emplacement area
- construction of two additional mine ventilation shafts
- continued operation of existing mine facilities until approximately 2035.

Predicted mine subsidence impacts

Subsidence Advisory provides the following advice on the predicted mine subsidence impacts detailed within the Environmental Impact Statement (EIS):

- The EIS shows proposed longwall extraction under the Bargo Township. This area is densely populated compared to other extraction areas in the proposal. The predicted ground movements for the Bargo Township are significantly higher than those measured in the Tahmoor North Project area and the proposal will result in a significantly higher levels of damage to residential structures than that experienced in Tahmoor North.
- The 1998 Tahmoor North Underground Extension EIS predicted 82% of houses in Tahmoor would be negligibly affected by mine subsidence. A report commissioned by Subsidence Advisory in 2016 found extraction of Tahmoor Coal's Longwalls 22 to 29 resulted in subsidence damage to approximately 40% of properties in Tahmoor and Thirlmere with an average repair cost of \$75,000 (Refer to Tab A and Tab B)
- There are significant social impacts for communities affected by mine subsidence. The timeframe over which a property is influenced by active subsidence can vary greatly due to a number of variables including extraction height and width, and ground conditions. Properties can be influenced by subsidence from multiple longwalls resulting in active subsidence periods

over several years. This results in significant delays before compensation claims can be assessed and paid.

- It is unclear how the potential for impacts resulting from non-conventional anomalous movements to surface improvements have been determined.
- NCAM have resulted in significant damage in the Tahmoor North area. As noted above, it is difficult to mitigate subsidence damage from anomalous subsidence movement through design

Recommended changes to the Tahmoor South Coal Project proposal

1. Modify proposal to reduce predicted subsidence under the Bargo Township

Subsidence Advisory recommends the proposal is modified to substantially reduce the predicted subsidence impact underneath the Bargo Township where most residential structures are concentrated. This may require changes to the proposed longwall widths, chain pillar dimensions and extraction heights in the area.

2. Modify EIS to incorporate final tilt in the damage category assessment

At present, tilts greater than 7mm/m are not included in the repair categories. Releveling buildings requires residents to be accommodated elsewhere whilst works are carried out. Subsidence Advisory recommends that residences subject to final tilts of 7mm/m or greater are assessed under repair category R4.

Additional comments

Tahmoor Coal undermined several pieces of infrastructure during the Tahmoor North Project, including local roads, utility infrastructure and services and the Main Southern Railway. During this project, performance measures were applied ensuring infrastructure was always safe and serviceable or serviceability should be maintained wherever practicable.

Subsidence Advisory recommends the application of these conditions is continued, including maintaining the relevant management groups, which have proved successful in the mitigation, identification and response to mining impacts.

Amendments to the Active Coal Mines Map

Subsidence Advisory is responsible for compensating subsidence claims within the defined 'inactive underground coal mining area' on the Active Coal Mines Map under the *Coal Mine Subsidence Compensation Act 2017* (the Act). Mine operators are financially liable for subsidence damage in active mining areas.

Generally, inactive areas were mined prior to enactment of the Act on 1 January 2018. There are inactive mining areas within the proposed mining layout. Subsidence Advisory intends to modify the Active Coal Mines Map to reflect the final mining layout resulting in Tahmoor Coal being liable for any impacts from the proposed Tahmoor South Coal Project.

Please contact me on (02) 4677 1967 or at matthew.montgomery@finance.nsw.gov.au if you have any questions or wish to discuss.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Matthew Montgomery', with a stylized flourish at the end.

Matthew Montgomery
Infrastructure Manager, Subsidence Advisory NSW

18 March 2019

Attachments

Tab A - Study into the Co-existence of Urban Development and Longwall Mining at Tahmoor Colliery

Tab B - Deloitte Report – Mine Subsidence Data, Data Summary