

Department Ref: SSD-8445
APA Ref: 446741

21 September 2020

Andrew Rode
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2124

EMAIL OUT: andrew.ode@planning.nsw.gov.au

Dear Andrew,

RE: Tahmoor South Coal Project
Underground longwall mining and associated activities, to extract up to 4 Mtpa ROM coal from the Bulli seam within CCL 716 and CCL 747 to the south of existing mining. Construction of two ventilation shafts.

Thank you for the opportunity to provide comment on this State Significant Development (SSD8445) – Tahmoor South Coal Project. Further to initial correspondence dated 2 September 2020, please find outlined below APA's response to the proposed development, for the Department's consideration.

APA Group (APA) is Australia's largest natural gas infrastructure business and has direct management and operational control over its assets and investments. APA's gas transmission pipelines span across Australia, delivering approximately half of the nation's gas usage. APA owns and operates over 15,000 km's of high-pressure gas transmission pipelines across Australia.

East Australian Pipeline Pty Limited and Gorodok Pty Ltd (APA) owns and operates the Moomba to Wilton Natural Gas Pipeline and the Moomba to Sydney Ethane Pipeline. Both pipelines are located within a 24.385-metre wide easement through Lot 1051 on DP547158 within the project area (see Table 1 for details):

Table 1: Transmission gas pipelines in the area of consideration

Pipeline	Pipeline Licence	Easement Width (m)	Diameter (mm)	Measurement Length (m)
Moomba to Sydney Ethane	PL15	24.385	200	600
Moomba to Wilton Natural Gas	PL16		850	795

Note: measurement length is applied to either side of the pipeline.

APA's Role

As a Licensee under the *Pipelines Act 1967*, APA is required to operate pipelines in a manner that minimises adverse environmental impacts and protects the public from health and safety risks resulting from operation of our high pressure gas transmission pipelines (**HPGTP**). Once a HPGTP is in place, APA is required to constantly monitor both the pipeline corridor and also a broader area within which we are required to consider land use changes and development and to assess what such changes means to the risk profile of the HPGTP.

APA has a number of responsibilities and duties to perform under a complex framework of legislation, standards and controls across Federal, State and Local Government landscapes. In particular, the *Pipelines Act 1967*, cites Australian Standard 2885 (**AS2885**) as a mandatory safety standard for the design, construction, operation and maintenance of transmission pipelines. In discharging our regulative responsibilities, APA needs to continuously review what is happening around its assets, what land use changes are occurring and what development is taking place to ensure it remains in a position to comply with applicable operational and safety standards and legislation whilst meeting its commercial obligations and imperatives.

Pipeline Risk Profile and the Measurement Length

In managing HPGTP's and considering land use changes, APA must focus on that area geographically defined by AS2885 as the Measurement Length (**ML**). The ML area is the heat radiation zone associated with a full-bore pipeline rupture. APA is mandated to consider community safety in the ML due to the high consequences of pipeline rupture to life, property and the economy.

The ML is determined by diameter and the Maximum Allowable Operating Pressure (**MAOP**) of the pipe. APA must consider any changes of land use within the ML area to determine the effect of a new use on the risk profile of the pipeline.

For reference, the ML of the Moomba to Sydney Ethane Pipeline and the Moomba to Wilton Natural Gas Pipeline is 600 metres and 795 metres, respectively. Note that the ML is a radial dimension, and therefore applies to both sides of the pipe.

Safety Management Study

AS2885 requires a Safety Management Study (**SMS**) to be undertaken whenever the land use classification of land within the ML changes. The purpose of an SMS is to assess the risk associated with a change in land use, including both construction risks and ongoing land use risks. The SMS will also develop appropriate controls to reduce risks to 'as low as reasonably practicable' (**ALARP**).

The cost of undertaking an SMS is to be borne by the proponent as the 'agent of change'. APA has developed a list of preferred SMS facilitators. This ensures facilitators are both independent and satisfactorily qualified to undertake this assessment. This list is available from APA on request.

Easement Management

APA is the beneficiary of a 24.385-metre wide pipeline easement in which the Moomba to Sydney Ethane Pipeline and the Moomba to Wilton Natural Gas Pipeline are located through Lot 1051 on DP547158 within the project area. To ensure compliance with the safety requirements of AS2885, APA needs to ensure our easement is managed to an appropriate standard. This includes:

- Ensuring the easement is maintained free of inappropriate vegetation and structures.
- Place warning signs at various mandated points along the pipeline route, including any change in property description/boundaries.
- Maintain a constant line of sight between warning signs.
- Undertake physical patrols and inspections of the easement.

APA will not accept outcomes that do not enable us to achieve our safety responsibilities to the surrounding community. Crossing of the pipeline should be at 90 degrees and minimised as much as possible.

Any works within the easement must be approved by APA through our Third Party Works Authorisation process. This process will ensure all works are undertaken in a safe manner that does not physically impact on the pipeline. If you are seeking to undertake works on property containing a pipeline, or are seeking details on the physical location of the pipeline, please contact Dial Before You Dig on 1100 or APA directly at APAProtection@apa.com.au.

Roads and services over easement

It is APA's preference that roads being constructed over pipeline easements be avoided wherever possible. The creation of roads over pipeline easements results in the following issues:

- Loss of control over easement area which has been secured through a legally enforceable easement agreement.
- Increased potential for external interference with the pipeline due to other parties utilising the road reservation for infrastructure (water, sewer etc.) over or around the pipeline.
- Increased difficulty accessing the pipeline due to the need for access approval from Council or other roads authorities.
- Increased cost in accessing the pipeline due to the need to make good a road reserve.
- Loss of ability to duplicate or loop the pipeline in the future.

APA will consent, in principle (and subject to detailed assessment), to periodic road or services crossings over the easement on the basis that the road authority and other utility operators (as relevant) enter into an agreement with APA to maintain our existing easement rights in the area to be covered by road.

The proponent must demonstrate that the number of crossings has been minimised. Crossings are to be as perpendicular as possible to the pipelines to minimise the area of impact.

Australian Pipeline Database

The pipeline industry, led and coordinated by the Australian Pipelines and Gas Association, has established the Australian Pipeline Database. This is a GIS based database that identifies all high pressure pipelines including the owner of the asset and subsequent contact details. This database is available under license, free of charge to government planning authorities. The database also allows Planning Authorities to export pipeline information for use within their own GIS systems.

The use of this data will assist Planning Authorities determine if strategic or statutory planning proposals are in the vicinity of a HPGTP and liaise with the Pipeline Licensee accordingly.

The Database can be accessed from the following link:

<https://maps.landpartners.com.au/apd/>

Proposed development

APA's response has been provided following review of the Second Project Amendment Report, prepared by SIMEC on behalf of Tahmoor Coal Pty Ltd, Report No. H180201 RP#1, Version No. v1 Final, dated 3 August 2020.

Appendix B (Subsidence Assessment, Drawing No. MSEC1123-15, Revision A, p.409) of this report shows the proposed mining longwalls LW105B and LW106B under APA's pipeline easement. While the plans reference APA's pipelines, it is not clearly marked as being for high-pressure transmission pipelines. Therefore, the level of risk associated with any intrusion into the easement is not adequately

communicated to those undertaking site works. The easement should be clearly identified as an easement for high pressure transmission pipelines on all relevant plans. In addition, the easement should be hatched and notated as 'no works to occur without the prior authorisation of the pipeline operator'.

These proposed mining longwalls under APA's pipelines are of serious concern as it is considered the current proposal is unacceptable without further analysis and demonstration of mitigation methods. Subsidence from mining activities near high pressure gas transmission pipelines has historically caused significant issues, particularly around the stresses which may compromise the integrity of the pipelines.

Section 6.8.3 of this report refers to "successful" past underground mining activities of these high-pressure transmission pipelines. However, the report fails to mention these past underground mining activities have only been successful as a result of extensive mitigation works.

For these reasons, it is strongly recommended that the proponent perform an in-depth analysis of the stress and strain that the pipelines will be subject to, as well as implement a system to monitor the actual movement and forces on the pipelines. This assessment should be completed in consultation with APA. It is also strongly recommended that proposed mining longwalls LW105B and LW106B are reduced such that they avoid crossing of APA's pipeline easement. However, please note the above stress analysis and monitoring would still be required in this case due to the extent of expected subsidence.

Should the proponent decide to proceed with proposed mining longwalls LW105B and LW106B under APA's pipeline easement, it is important the proponent is aware that they will be required to ensure that there are no excessive stresses on the pipelines. This may involve exposing large sections of the pipelines, which comes with a host of logistical and technical difficulties as well as significant cost implications for the proponent.

In summary, the precedent of other "successful" mining operations is considered poor, as it fails to note that significant works are required to ensure the continued safe and efficient operation of these state significant pipelines during these works. APA considers its subsidence concerns and recommendation of removal of proposed mining longwalls LW105B and LW106B under the pipeline easement are consistent with the proponent's recent action to remove proposed mining longwalls LW107B and LW108B over the Bargo township in response to recent community feedback. These community concerns are shared by APA, and for our pipelines which pose a significant consequence if subsidence stresses resulted in a pipeline failure event that would not only impact pipeline safety but the broader community.

Comments

On the basis of the information provided, APA does not object to the proposed development subject to the following conditions being included with any approval issued for the proposal:

Conditions of Approval

1. Amend Drawing No. MSEC1123-15 (Gas Infrastructure)

This Drawing must be amended to remove mining longwalls LW105B and LW106B from under APA's pipeline easement, unless written confirmation is provided from the pipeline licensee / operator [East Australian Pipeline Pty Ltd and Gorodok Pty Ltd] allowing the works subject to appropriate mitigation measures being implemented.

2. Pipeline Stress and Strain Assessment Required

Prior to the development commencing, the proponent must perform an in-depth analysis of the stress and strain that the pipelines will be subject to, as well as implement a system to monitor the actual movement and forces on the pipelines. This assessment must be completed by the proponent in consultation with APA.

3. No Improvements within Easement

Buildings, structures, roadway, pavement, pipeline, cable, fence, on-site waste water treatment (or irrigation area), or any other improvement on or under the land within the gas transmission pipeline easement must not be constructed without prior consent in writing from APA. No structure or vegetation will be permitted on the easement that prohibits maintenance of line of sight along the pipeline easement.

4. Third Party Works Authorisation

Prior to the commencement of any works within the transmission pipeline easement, the proponent must seek a third party works authorisation from APA for approval. Works within the easement must comply with any conditions attached to a third party works approval.

5. Road Crossings Engineering Plans required

Prior to development commencing for any stage which include the transmission pipelines, detailed engineering plans for any proposed road crossings over the transmission pipeline easement must be submitted to and approved by the Department of Planning, Industry and Environment. These crossing must not result in any reduction in the cover over the pipeline asset. The Department of Planning, Industry and Environment will seek the view of the pipeline licensee / operator [East Australian Pipeline Pty Ltd and Gorodok Pty Ltd] in this matter.

6. Construction Management Plan

Prior to the commencement of any works, including demolition, within the easement or on land within 50 metres of the pipeline easement, a Construction Management Plan must be submitted to and approved by the Department of Planning, Industry and Environment. The plan must:

- Prohibit the use of rippers or horizontal directional drills unless otherwise agreed by the operator of the gas transmission pipeline.
- Avoid significant vibration, heavy loadings stored over the pipeline and Heavy vehicle / plant crossings of the pipeline within the easement.
- Be endorsed by the operator of the transmission pipelines where the works are within or crossing the relevant gas transmission easement.
- Include any other relevant matter to the satisfaction of the Department of Planning, Industry and Environment.

The Department of Planning, Industry and Environment must be satisfied that pipeline licensees [East Australian Pipeline Pty Ltd and Gorodok Pty Ltd] has reviewed and approved the Construction Management Plan. The Construction Management Plan must be implemented to the satisfaction of the Department of Planning, Industry and Environment. The Construction Management Plan may be amended to the satisfaction of the Department of Planning, Industry and Environment.

7. Easement Delineation On Site

During construction, the boundary of the easement must be clearly delineated on site by temporary fencing (or other means as agreed by APA), and clearly marked as a hazardous work zone/ restricted area.

8. Easement Delineation On Plans

All plans which include the area of the pipeline easement must have the easement clearly identified with hatching on the full width of the easement. The easement must also be clearly labelled as *'high pressure gas pipeline easement – no works to occur without the prior authorisation of the pipeline operator'*.

9. Services

The design of any infrastructure services shall minimise encroachment on the pipeline easement. Any application for an APA permit for an easement crossing will be required to demonstrate that an alternative route, avoiding the easement, is not feasible.

10. Pipeline Operator Access

The ability of the pipeline operator to access the easement must be maintained at all times to facilitate prompt maintenance and repairs. This may be through interlocking padlocks so APA has keyed access as any time. APA field officers will undertake any necessary site induction to facilitate unaccompanied access.

Note

If you are planning on undertaking any physical works on property containing or proximate to a pipeline, or are seeking details on the physical location of a pipeline, please contact Dial Before you Dig on 1100 or <https://www.1100.com.au/>, or APA directly on APAprotection@apa.com.au.

Note

An early works agreement from APA is required for any assessments/approvals that require greater than 3 days assessment or supervision. Lead in times for agreements can be up to 12 weeks. Please contact APA at APAprotection@apa.com.au or 1800 103 452.

Note

Any improvements within the transmission pipeline easement undertaken by third parties is at the risk of the proponent who will remain liable. APA will not be liable for any costs associated with the reinstatement of any vegetation and/or infrastructure constructed on the easement.

Note

Where access to the pipelines will not be readily available because of the proposed development e.g. significantly obstructed by pavement etc an assessment of the condition of the pipeline coating will be required prior to development commencing. Any re-coating works required as a result of this assessment, due to future inaccessibility or as an outcome of an SMS will be at the developers expense and to the satisfaction of the pipeline licensee/operator.

Note

APA has a suite of standard engineering drawings to assist with detailed design. These are available upon request. Please contact APA at APAprotection@apa.com.au or 1800 103 452.

APA does not seek to unnecessarily inhibit future development proximate to our assets and is happy to work development proponents to achieve mutually acceptable and compliant outcomes. Any interested parties are strongly encouraged to contact APA early to discuss the process of integrating APA assets into future developments.

Should you wish to discuss the contents of this correspondence, or have any further queries, please contact me on 07 3223 3385 or the Infrastructure Planning & Approvals team at planningnsw@apa.com.au.

Yours faithfully,

A handwritten signature in black ink, appearing to be 'BA' followed by a long horizontal stroke.

Ben Setchfield
Senior Urban Planner
Infrastructure Planning and Approvals

Att: APA Pipeline Mapping Extract

Attachment 1: APA Pipeline Mapping Extract

