

1 July 2021

Council Reference: DA2021/0145
APA Reference: 445502, 449231

Bill Vanry
Hilltops Shire Council
Locked Bag 5
Young NSW 2594

EMAIL OUT: bill.vanry@hilltops.nsw.gov.au

Dear Bill,

RE: Referral Response
4177 Lachlan Valley, Boorowa – Lot 1402 on DP862746, Lots 146, 147, 148, 149 150, 151, 152 157, 158, 159, 160, 161, 162, 163, 164 on DP2493
Solar Farm

Thank you for your referral request received on 17 June 2021 in relation to the above mentioned development proposal. APA's referral response follows preliminary planning advice (445502) for the proposal dated 14 April 2020.

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 Ltd and Gorodok Pty Ltd (**APA**) own and operate two High Pressure Transmission pipeline located within easement through the subject site. Refer to Table 1 for details.

Table 1: Transmission pipelines in the area of consideration

Pipeline	Pipeline Licence	Easement (m)	Diameter (mm)	Measurement Length (m)
Moomba to Sydney Ethane	15	24.385	200	600
Moomba to Wilton Natural Gas	16		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 the 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 – Sydney Ethane Pipeline is 600m and Moomba to Wilton Natural Gas Pipeline is 795m. The greatest ML applies in this instance. Note that the ML is a radial dimension, and therefore applies to both sides of the pipeline.

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**).

It is APA's assessment that while the proposed Solar Farm is partially located within the pipeline Measurement Length. Given the scale and location of the proposed Solar Farm, a Safety Management Study is not required to be undertaken in this instance.

Please refer to the 'Proposed Development' Section of this letter for further comment.

Easement Management

APA's pipelines and associated easement are located on a south-east alignment through a portion of Lot 1402 on DP862746. The following details regarding easement management are therefore provided for general information.

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 pipelines should be at 90 degrees and minimised as much as possible.

Any proposed works within the easement must be approved prior to works occurring, 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. Anyone 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 <https://www.1100.com.au/> or APA directly at APAprotection@apa.com.au.

Proposed development

The details of the proposed development, which form the basis for this letter, are shown on Site Plan, prepared by ITP Renewables, Project Ref. Boorowa 1B 5MW Solar Farm, Drawing No. BOO1B-G-0400, Revision No. 2, dated 7.06.2021.

Development Overview

The proposed development is for a 5MW Solar Farm to be located within 11.99 Ha of the overall site area (38.5 Ha). APA's pipelines and associated easement are located approximately 270 metres south-west of proposed Solar Farm at the closest point.

Electrical Interference

Electrical works near the pipeline (including crossings) have the potential to impact on the pipelines safe operation and studies in accordance with AS4853 are necessary. The cost of these studies and any necessary mitigations must be borne by the development proponent.

Pipeline Crossings

APA seeks to minimise the number of crossings and have these perpendicular to the pipeline if possible. This should include the co-location of road and services crossings. No work on the easement, including crossings, changes in ground level or other works, may occur without the prior authorisation of APA. Detailed design for crossings will need to be informed by field works to positively locate the pipeline (alignment and depth). Such field works must only be performed under APA permit.

Crossings of underground services must accord with APA requirements, particularly minimum separation distances. Road crossings for heavy vehicles will require a concrete slab crossing to disperse loads on the pipeline to an acceptable level. This will need to be designed to APA requirements. Vehicular crossings during construction and operation will need be at the agreed crossing points.

Pipeline Easement Plan Notation

APA's pipeline easement should be clearly marked as being for a high pressure transmission pipeline easement. This is to ensure the level of risk associated with any intrusion into the easement is adequately communicated to those undertaking future site works. The easement should be clearly identified as an easement for a high pressure transmission pipeline 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*'.

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. Risk Assessment Required

Prior to the development commencing, and to inform detailed design, the applicant must conduct electrical hazard studies in accordance with (the requirements of) Australian Standard 4853-2012 (for Low Frequency Induction and Earth Potential Rise). The applicant must address any relevant requirements and any recommendations and/or actions must be implemented to the satisfaction of APA. All costs associated with the study, and implementing its recommendations and/or actions are to be borne by the applicant. The applicant must complete validation testing upon completion of construction.

2. 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 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.

3. Third Party Works Authorisation

Prior to the commencement of any works within the transmission pipeline easement the proponent must enter a Third Party Works Authorisation with APA Group. Works within the easement must comply with any conditions attached to a Third Party Works Authorisation.

4. Construction Management Plan

Prior to the commencement of any works, including demolition, within 50 metres of the pipeline, a construction management plan must be submitted to and approved by the assessment manager. The plan must:

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

The assessment manager must be satisfied that the transmission pipeline licensee [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 assessment manager. The construction management plan may be amended to the satisfaction of the assessment manager.

5. Notation of Pipelines on Plans

All plans which include the transmission pipeline must have it clearly notated as *'high pressure transmission pipeline - no works to occur without the prior authorisation of the pipeline operator'*.

6. 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 pipeline easement – no works to occur without the prior authorisation of the pipeline operator'*.

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

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.

For any further enquiries relating to this correspondence, please feel free to contact myself 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 'BS', with a long horizontal stroke extending to the right.

Ben Setchfield
Senior Urban Planner
Infrastructure Planning and Approvals