

17 September 2019



Attention Emilly Wickham  
Department of Planning, Industry and Environment  
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Jemena Gas Networks  
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Dear Emilly,

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## **Jemena Submission – SSD 9667 – Light Horse Business Hub, Eastern Creek**

Jemena appreciates the opportunity to submit a response to the State Significant Development – SSD 9667 comprising the first stage of the proposed Light Horse Interchange Business Hub at Eastern Creek

### **Background**

Jemena Asset Management Pty Ltd on behalf of Jemena Gas Networks (NSW) Ltd (collectively Jemena) owns and operates a high pressure gas pipeline which traverses through the proposed development parcel which is subject to SSD 9667. Gas pipeline particulars are as below;

- The Jemena Trunk Pipelines (NSW Pipelines Act 1967 Licence 7 (Horsley Park to Plumpton))

The authority to operate gas transmission pipelines is vested in the Pipelines Act 1967 (NSW). Jemena has rights and obligations under its pipeline licence that relate to ensuring the ongoing safety and integrity of its pipelines. Jemena is statutorily obligated to operate the pipeline in accordance to Australian Standard for Pipelines - Gas and Liquid Petroleum (AS2885).

The standard recommends that activities which potential impacting a pipeline should be carefully considered to ensure that any associated risk on the pipeline and any possible risk of property damage or injury to the public, local landholder or the environment is minimised. These obligations include assessing and managing risks to pipelines, such as those associated with external activities and/or interference arising from proposed developments or changes in land uses within adjoining parcels.

## Department of Planning and Environment – Planning Circular PS 18-010

DPE has enacted a planning circular as of October 2018, to assist councils and developers of the mandatory notification and assessment requirements for development near pipelines under clause 66C of the State Environmental Planning Policy.

The planning circular provides a framework to assist stakeholders in the location of pipeline corridors and the requirement for notification by consent authorities to pipeline owners for pending development in proximity to the pipelines. The intent of the circular is to protect the community from unacceptable levels of risks from pipelines whilst protecting the integrity of the pipelines themselves.

### Jemena's position on the Planning Circular PS 18-010

Jemena supports the DPE initiatives in promoting pipeline awareness and safety. Jemena prepared a further overarching position paper to assist DPE in the application of the planning circular in December 2018. The position paper provided DPE and consent authorities with detail on the 'Measured Length' ( see definition below) .

*Definition - (A Pipeline's **Measurement Length** is defined in AS2885 as a radial distance from the Pipeline, calculated by determining the 4.7kW/m<sup>2</sup> heat radiation contour in an event of a full bore rupture event. The event causing this type of rupture is typically works related to external parties, unaware and not following Jemena's requirements. During this type of event, an unprotected person exposed to the radiation level for a short period of time is likely to experience severe burns and possible fatality. A Pipeline rupture also has the potential to impact the environment as well as destroy and damage surrounding buildings. Jemena has determined a **Measurement Length** of **766m** applies to both Pipelines. The Measurement Length is to be used to determine the appropriate type of land use and development occurring near the Pipelines)*

Pursuant to and consistent with Jemena's previous advices to DPE, Jemena as a pipeline operator has adhered to pipeline regulations for the operation and maintenance standards contained in AS2885.3. Additionally, new safety management protocols have been developed and enacted in S2885.6 which has an increase emphasis on the ALARP principles.

Jemena has advised DPE and consent authorities for the need to convene a Safety Management Study (SMS) to identify and consider the risk mitigations within the in the Measured Length. Recommendations would then need to be considered by the consent authority as part of any development assessment process.

An extract of Jemena's position paper to DPE issued on 17<sup>TH</sup> December 2018 is attached below.

#### Engineering Considerations – 17 December 2018

##### Jemena Pipeline Impact Framework 1. South West Growth Area

In relation to development within the South West Growth Area where land has been rezoned from rural to a zoning which permits higher population density uses, such as residential or Commercial Use:

- a. Any area outside of Jemena's pipeline easement boundary – Jemena does not have any objection to normal detached residential use (i.e. single dwellings or duplexes, not High Density Residential Use).
- b. Within 76 metres of Jemena's pipeline easement boundary – Jemena recommends that the consent authority does not approve any Sensitive Land Use or High Density Residential Use.
- c. Between 76 metres and 766 metres from Jemena's pipeline easement boundary – Jemena recommends that the consent authority consults with Jemena in relation to any proposed Sensitive Land Use or High Density Residential Use, which Jemena recommends are considered by the consent authority on a case by case basis, taking into account any additional controls that Jemena may specify having regard to the location and nature of the development proposed.
- d. Beyond 766 metres from Jemena's pipeline easement boundary – Jemena does not have any objection or requirements for any proposed land use.
- e. All development proposed (including roads and utilities) within Jemena's pipeline easement will require Jemena review and approval if acceptance has not already been provided (as is the case already).

#### **Safety Management Study (SMS)**

The SMS assesses the risk of a pipeline risk profile on potential pipeline threats from development during construction phase and/or subsequent occupancy of the precinct. Pipeline threats arising from the construction activities are reviewed to identify credible failure mode taking into account the pipeline characteristics and operating parameters. Threat mitigation measures and controls include both physical and procedural protection are also reviewed against the identified threat to determine the likelihood of a failure and its potential consequences. The SMS findings will identify where applicable if additional protection actions will be necessary to reduce the risk as low as practicable.

#### **SSD 9667**

The First Stage of the proposed development contains details on the demolition of existing improvements, bulk earthworks, infrastructure and subdivisional works to facilitate the construction of an Industrial Business Hub comprising industrial and light industry land uses along with ancillary office accommodation.

Jemena has participated in concept stage discussions with the land owner representatives of the Western Sydney Parkland Trust (WSPT) and the Department (DPE) during the SEAR stage – 9667. Jemena has provided recommendations for

the Department to consider (email dated 26.10.2018 attention Melisa Prochazka). Additional comments provided below should be read in context of the previously supplied recommendations provide at the SEAR stage of the development conception.

Jemena recommends that a Safety Management Study be convened to workshop the impacts to the proposed development activities during the demolition, construction and operation phases on the high pressure pipeline within the development scope area. The introduction of threats caused by but not limited to

- changes in land uses,
- construction of a primary access road (Ferrers Road) across the pipeline alignment and requirement for bridging structure,
- changes in land contours which may increase water flows to Eskdale and Reedy Creek
- flood mitigation works with the augmentation of stormwater flows into a flood offset area and Bio Basin adjacent to the pipeline.
- Utility service crossings and civil works

Not seeking to pre-empt the outcome of the SMS, however as a guide for preplanning purposes only for the DE to consider. Jemena has previously recommended controls that have arisen from conducting a SMS which includes design and procedural protections requiring the erection of additional pipeline signage and increased pipeline patrols. Together with physical interference protections in the form of concrete slabbing over the pipeline for a distance of 200 metres.

Jemena confirms that the above is an indication only of the type of mitigations sought flowing out of an SMS. Jemena confirms that it has not conducted a site specific SMS for the Light Horse Interchange Business Hub. Jemena will be engaging further with the DPE to conduct an SMS to ensure suitable protection measures are incorporated into the scope of the project.

Jemena may seeking to execute a Land Crossing Agreement (LCA) and or a equivalent Deed agreement to mange the compliance of agreed control measures with WSPT and or the developer of the project.

The SMS is an appropriate forum to address the requirements for mandatory notification and assessment requirements for development near pipelines flowing from the Infrastructure SEPP under Clause 66C.

If you have any quires, please do not hesitate to contact the undersigned.

Kind Regards



Luke Duncan  
Property Coordinator  
Network Property