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Department of Planning and Environment

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# Policy proposal for developments near High Pressure Dangerous Goods pipelines

Explanation of Intended Effect

April 2022



# Acknowledgement of Country

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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# Contents

<b>Introduction.....</b>	<b>4</b>
Current framework.....	4
HP DG pipelines and hazards .....	5
The need for a review .....	6
Policy proposal.....	6
Effect of policy proposal .....	8
Have your say.....	8

# Introduction

The NSW Department of Planning and Environment (the department) is proposing policy changes to strengthen the planning framework for development near high pressure dangerous goods pipelines (HP DG pipelines).

This policy review focuses on HP DG pipelines that transport natural gas (methane), liquid fuel (gasoline), ethane and jet fuel. Natural gas and liquid fuel are used primarily as a fuel, ethane is principally used as a raw material for the manufacture of ethylene and jet fuel is used to power aircraft.

HP DG pipelines exist throughout NSW's built environment, with their exact locations withheld from the public to protect them from targeted damage and ensure community safety. While these pipelines do transfer essential materials to where they are needed, they can, in the built environment, present risks that could potentially cause loss of property or life in extreme circumstances. This is why careful land use safety planning is required for this important form of infrastructure along with the development that adjoins it.

Our policy proposal follows feedback from consent authorities and pipeline operators highlighting opportunities to further strengthen the framework. In response, the proposed policy approach covers a new approach for strategic planning and planning proposals and strengthens the current framework for development proposals. This aims to:

- mitigate potential land use safety conflicts
- provide proponents, pipeline operators and consent authorities with a resource for identifying and considering risks associated with development near HP DG pipelines

The policy proposal includes:

- notifications to pipeline operators of certain development applications near their infrastructure
- a new section 9.1 Ministerial direction
- a guideline to support the direction

The policy proposal aims to clarify requirements so that proponents, pipeline operators and consent authorities can appropriately consider risk and mitigate land use safety issues.

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## Current framework

### Development applications

The *Environmental Planning and Assessment Act 1979* (EP&A Act) provides that in determining a development application a consent authority must consider:

- the provisions of any environmental planning instrument

- the likely impacts of the development
- the suitability of the site for the development.

If a development is proposed adjacent to land where a major HP DG pipeline is located, clause 66C of *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP) requires a consent authority to:

- identify and consider potential safety risks and risks to the integrity of the pipeline
- notify the relevant pipeline operator and consider any feedback in a mandated timeframe.

This clause is supported by Planning Circular 18-010 - *Development adjacent to high pressure pipelines transporting dangerous goods* (PS 18-010), which provides guidance to consent authorities on how to appropriately apply clause 66C for relevant development applications.

## Planning proposals

The *Local Environmental Plan Making Guideline* (DPE, December 2021) provides guidance and information on the process for preparing planning proposals. While it does not contain a specific guidance for considering risk to or by HP DG pipelines when preparing or determining planning proposals, it does note that a planning proposal must have site-specific merit and consider existing uses and hazards in the vicinity of a proposal.

## Outside the NSW Planning Framework

Independent of the NSW planning framework, *the Pipelines Act 1967* (the Pipelines Act) identifies, considers and manages risks from HP DG pipelines through compliance with *Australian Standard 2885 Pipelines – Gas and Liquid Petroleum* (AS 2885).

AS 2885 requires operators to define measurement lengths from pipelines that capture the full extent of the risks of pipeline rupture.

Within a measurement length, a pipeline operator must specify a location class or classes that reflects how the land is primarily used (for example, residential, rural or commercial). The location classes also reflect levels of societal risk.

Part 6 of AS 2285 deals with pipeline safety management and puts the onus for controlling safety threats from pipelines on pipeline operators. To mitigate and control threats, pipeline operators are required to develop a safety management study that is reviewed when major encroachment or major land use changes occur. This review identifies and manages threats in a cooperative manner between a pipeline operator and the proponent of a proposed development.

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## HP DG pipelines and hazards

The key potential hazards from pipelines are leaks, due to:

- mechanical failures, including material defects or design and construction faults
- corrosion, including both internal and external corrosion
- ground movement and other failures, including ground movement due to earthquakes, heavy rains/floods or operator error, and other natural hazards such as lightning

- third party activity, including damage from heavy plant and machinery, or damage from drills/boring machines or hot tapping.

The impact of a potential hazard is described as its risk profile. The risk profile is generally determined by the type of material being transported, the size of a pipeline, its operating pressure, and the size and sensitivity of the population near a pipeline. In extreme circumstances, potential consequences of pipeline failure include asphyxiation, fires, vapour cloud explosions, toxic smoke and explosions in confined spaces.

## The need for a review

The NSW planning system seeks to strike the appropriate balance between protecting the community from potential safety risks, while supporting the development of this essential infrastructure by protecting the integrity of pipeline infrastructure from land use conflict. This requires us to consider HP DG pipelines throughout all facets of the planning system, from strategic land use planning through to development assessment.

The policy proposal follows feedback from consent authorities and industry that there are opportunities to further strengthen the framework that will benefit community safety and provide for orderly growth.

## Policy proposal

### Infrastructure SEPP amendment -automatic notification of certain developments

The Infrastructure SEPP is proposed be amended to require that pipeline operators are notified about certain developments within the ‘potential safety risk consideration distance’ from a pipeline. This distance from a pipeline is known as an application area. Application areas vary depending on the material it transports, as outlined in Table 1.

**Table 1: Potential safety risk consideration distance (m) from either side of the pipelines (application areas)**

Development type	Gasoline pipeline	Natural gas pipeline	Ethane pipeline	Jet fuel pipeline
Proposals with sensitive uses and/or significant population	140	200	140	140

Within application areas, the following types of development would be subject to notification:

- development that results in a significant increase in population
- development that proposes a sensitive use (such as an a child care facility).

This new notification process ensures pipeline operators can engage with the development application at exhibition stage and assist proponents and consent authorities with identifying and

managing any potential safety risks. This can help to avoid costly mitigation or remediation measures later in the planning process and prevent delays to development determinations.

The notification requirement is proposed to be automated by the department through the Planning Portal, meaning that there is no additional administration burden on consent authorities.

Early notification will also assist pipeline operators to fulfill their requirements under AS 2885, ensuring threats to and from HP DG pipelines are also captured under this legislative framework.

## Section 9.1 direction

Section 9.1 of the EP&A Act allows the Minister to direct a council to prepare a local environmental plan in accordance with the contents of the direction. A proposed new section 9.1 direction would:

- identify objectives relevant to the direction,
- outline of where and when the direction applies,
- outline of what a relevant planning authority must do if the direction applies, and
- identify conditions for consistency with the direction.

The section 9.1 direction is proposed to apply to planning proposals that are:

- wholly or partially in the application area of the HP DG pipeline (as identified in Table 1); and
- proposing sensitive uses – meaning that the planning proposal seeks to introduce sensitive uses or vulnerable people (such as child care or hospitals) or other uses that may result in a significant population increase on land that is within the land use safety risk consideration distance from a pipeline (e.g. multi-dwelling housing or uses that seek to increase the working population).

The department would also adopt the application of the direction in considering risk when undertaking its functions of preparing environmental planning instruments and for strategic and precinct planning.

## Guideline

The department has also developed a draft *Guideline for planning proposals near HP DG pipelines (Attachment A)*, to support the application of the direction. This gives further details on circumstances where the consideration of land use safety risk is required, as well as how to consider risks from HP DG pipelines when preparing planning proposals or strategic planning documents.

The proposed guideline is designed to help proponents, pipeline operators and planning authorities to identify and consider risks to and from HP DG pipelines at the planning proposal stage. It covers:

- potential safety risks (including suggested setback distances, trigger points and actions for risk consideration)
- where and when risks must be considered
- the process for considering risk
- AS 2885 and risks to the integrity of pipelines.

The guideline is a resource for planning authorities, pipeline operators and proponents that need to appropriately consider risk for planning proposals adjacent to pipelines. The guideline will also

require land use safety studies, in the form of a site-specific quantitative risk analysis, for some planning proposals to appropriately identify and assess risks from HP DG pipelines.

## Other

In formalising a final policy following public exhibition, the department will also update Planning Circular PS-18-010 - *Development adjacent to high pressure pipelines transporting dangerous goods*.

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## Effect of policy proposal

The policy proposal is designed to reinforce the existing planning framework for considering safety risk from HP DG pipelines and risks to the integrity of pipeline infrastructure.

The introduction of a Ministerial direction and associated guideline for preparing planning proposals will ensure key land use safety objectives are being considered and will help planning authorities and proponents to identify whether the consideration of risk requires the undertaking of a land use safety study.

The effect of providing automated notifications to pipeline operators via the NSW Planning Portal will increase engagement with pipeline operators at the public exhibition stage of applicable development applications. This engagement will optimise development design for both community and pipeline safety.

The policy proposal is not intended to prohibit development. Rather it reduces the likelihood of development having to bear the costs of mitigation or remediation measures later in the planning process and prevents delays to development determinations through better risk analysis earlier in the process.

The department will provide councils that have HP DG pipelines in their LGA with a map of the application area to aid in their understanding of the effect of the proposed policy.

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## Have your say

This explanation of intended effect is being exhibited in line with the department's Community Participation Plan.

To make a submission on the policy proposal, visit [www.planningportal.nsw.gov.au/draftplans/exhibition/infrastructure-sepp](http://www.planningportal.nsw.gov.au/draftplans/exhibition/infrastructure-sepp) and complete the submission form.