



Eastern Gas Pipeline Modification 1

Port Kembla Lateral Looping Pipeline
State Significant Infrastructure Modification Assessment
(SSI 9973 MOD 1)

Published by the NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Eastern Gas Pipeline Mod 1

Subtitle: Port Kembla Lateral Looping Pipeline

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Executive Summary

Jemena Eastern Gas Pipeline (1) Pty Ltd and Jemena Eastern Gas Pipeline (2) Pty (Jemena) own and operate the Eastern Gas Pipeline (EGP), an approximately 797-kilometre (km) gas pipeline connecting Longford in Victoria to Horsley Park in New South Wales.

The EGP is a key gas supply in NSW to Sydney, Canberra and Wollongong as well as a number of regional centres. More than half the gas consumed in NSW is conveyed along the EGP.

The project approval for the NSW portion of the EGP includes the 6.3 km Port Kembla lateral that connects Port Kembla to the main EGP at Kembla Grange in the Wollongong Local Government Area. That pipeline has a design capacity of 32 petajoules (PJ) per year.

Jemena is seeking to modify the project approval to allow it to increase the capacity of the Port Kembla lateral by constructing and operating a second pipeline (the looping pipeline) that would generally follow the same alignment as the existing Port Kembla lateral.

This additional capacity would mean gas from the Port Kembla Gas Terminal, which was recently approved to import up to 115 PJ of gas per year project, could be conveyed to the EGP and made available to the wider NSW market.

The Port Kembla Gas Terminal was declared to be Critical State significant infrastructure because of its potential to increase the security, reliability and affordability of gas in NSW. The proposed modification is of strategic importance to NSW, as it would facilitate the operation of the Port Kembla Gas Terminal at full capacity.

The Department publicly exhibited the Modification Report on its website from 20 May to 2 June 2020 and referred the modification request to relevant government agencies for advice. The Department received one submission in the form of a comment from a neighbouring business concerned about the proximity of the pipeline to its own approved development activities. Jemena revised the pipeline alignment in this location to avoid conflict with the approved development.

Assessment

The key potential impacts of the proposed looping pipeline relate to potential offsite hazard and risks, and impacts associated with construction.

The preliminary hazard analysis (PHA) identified that the proposed looping pipeline would comply with the relevant criteria for acceptable risk, and the Department considers that the identified safeguards would generally be adequate to manage the risks.

The Department has recommended conditions requiring Jemena to carry out additional studies based on the final design of the pipeline and to prepare or revise a number of safety and emergency plans.

With the implementation of these conditions, the Department considers that the proposed looping pipeline would not significantly increase the risk of hazards to people or the environment.

Construction of the pipeline would disturb 0.37 hectares of native vegetation. The Department has recommended conditions to offset that impact. The proposal is not predicted to impact any Aboriginal or historic heritage. However, the Department has recommended conditions to ensure any unexpected heritage finds are appropriately managed.

Construction would also generate traffic, dust and noise. However, the land use in the area is mostly commercial or industrial with few sensitive receivers near the proposed pipeline route, and the construction phase would be limited to around nine months with progressive construction of the pipeline such that amenity impacts would be much shorter at any one receiver.

The Department considers the impacts would not be significant and can be managed through the implementation of the recommended conditions, including construction being undertaken during standard construction hours set in the NSW Government *Interim Construction Noise Guideline*, subject to an out of hours work protocol.

The Department has also recommended a range of conditions to ensure risks associated with the disturbance of potentially contaminated soils, erosion and sedimentation, waste generation etc. are appropriately identified and managed. The Department is satisfied that these conditions would ensure any construction impacts would be minimised.

Evaluation

Department has assessed the merits of the proposed looping pipeline and the impacts during construction and operation. The Department considers that the issues raised by the public authorities and one private organisation have been appropriately considered and responded to by Jemena and any residual issues can be appropriately mitigated or managed through the Department's recommended conditions of consent.

The modification would facilitate the operation of the Port Kembla Gas Terminal project at full capacity and realise the benefits associated with that project for the NSW gas market. The Department considers the benefits of the proposed looping pipeline outweigh its impacts, and the modification to be in the public interest and that the modification should be approved, subject to the recommended conditions.

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1 Introduction

1.1 Background

Jemena Eastern Gas Pipeline (1) Pty Ltd and Jemena Eastern Gas Pipeline (2) Pty (Jemena) owns and operates the Eastern Gas Pipeline (EGP), an approximately 797-kilometre (km) gas pipeline connecting Longford in Victoria to Horsley Park in New South Wales (NSW) (see **Figure 1**). The pipeline was constructed in November 2000 to supply natural gas from the Gippsland Basin in Victoria to customers in NSW and the Australian Capital Territory.

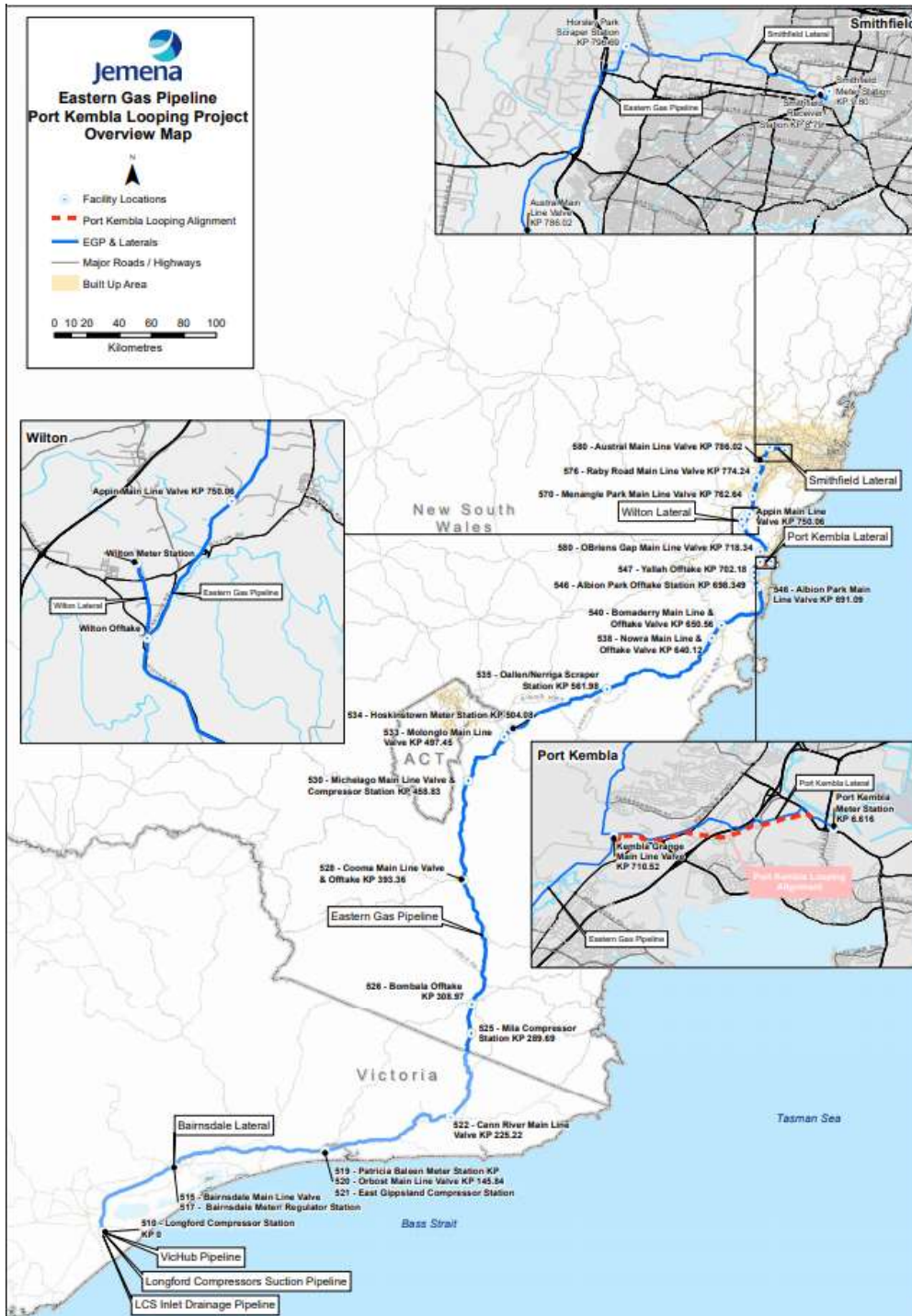


Figure 1 | Eastern Gas Pipeline

The EGP is a key gas supply artery in NSW that transports gas to Sydney, Canberra and Wollongong as well as a number of regional centres. More than half the gas consumed in NSW is conveyed along the EGP.

The NSW portion of the pipeline (the project) includes the main line from the Victoria/NSW border to Horsley Park, and around 25 km of lateral pipelines, including the 6.3 km Port Kembla lateral that connects Port Kembla to the main EGP at Kembla Grange in the Wollongong Local Government Area (see inset in **Figure 1**).

Jemena is seeking to modify the project approval to allow it to increase the capacity of the Port Kembla lateral by constructing and operating a second pipeline (the looping pipeline) that would generally follow the same alignment as the existing Port Kembla lateral (i.e. to duplicate the Port Kembla lateral).

The proposed looping pipeline alignment traverses predominantly industrial and commercial land. Key land uses include the rail corridor, major roads, residential areas, open space areas and industrial and commercial properties.

Environmental features surrounding the looping pipeline are generally limited due to the presence of industrial, commercial and residential developments and given the pipeline generally follows the alignment of the existing Port Kembla lateral. Notwithstanding the pipeline route traverses areas of vegetation including south of the Princes Motorway. While there are some ephemeral drainage lines, no significant waterways are traversed by the pipeline alignment, but waterways in the region include Allans Creek, American Creek and Budjong Creek.

1.2 Strategic Context

In April 2018, project approval was granted to Australian Industrial Energy Pty Ltd (AIE) to construct and operate the Port Kembla Gas Terminal, a liquefied natural gas (LNG) import terminal in Port Kembla. Once constructed, the Port Kembla Gas Terminal would receive shipments of LNG, convert the LNG to gas, and transfer the gas via a dedicated pipeline (a part of the Port Kembla Gas Project) to Cringilla, where it would connect to the Port Kembla lateral for onward distribution to the NSW market via the EGP.

The Port Kembla Gas Terminal would be capable of supplying up to 115 petajoules (PJ) of gas per year to the NSW market, which is over 70% of the State's total gas demand. Because this would potentially increase the security, reliability and affordability of gas in NSW, the former Minister for Planning determined the Port Kembla Gas Terminal is essential to NSW for economic reasons and declared it to be Critical State significant infrastructure.

However, the supply of gas from the Port Kembla Gas Terminal into the broader gas network is currently constrained by the Port Kembla lateral pipeline, which has a design capacity of just 32 PJ per year.

The proposed looping pipeline capacity would have a theoretical maximum throughput of 440 PJ per year if additional gas compression was provided. This additional compression capacity is not proposed at this stage and would be subject to a separate assessment process. If approved, the pipeline would facilitate the operation of the Port Kembla Gas Terminal project at full capacity and increase the supply of gas to the NSW market.

1.3 Approval history

Construction and operation of the project was authorised by a licence (Licence 26) issued under the *Pipelines Act 1967* (Pipelines Act) in 1998. Licence 26 was subsequently varied to allow extensions to the pipeline and the construction and operation of laterals, including the Port Kembla lateral, which was authorised in October 2001.

Under the then provisions of the Pipelines Act, Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) did not apply to the project. However, those provisions were repealed in September 2006 by the *Pipelines Amendment Act 2006* which included transitional provisions for existing pipelines, under which Pipeline Licence 26 was deemed to be a planning approval granted under Part 3A of the EP&A Act.

Part 3A of the EP&A Act was also repealed in October 2011, and under the provisions of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the project was transitioned to State Significant Infrastructure (SSI) in May 2019.

The proposed modification is therefore the first modification to the project assessed under Section 5.25 of the EP&A Act.

2 Proposed modification

The proposed modification (see **Figure 2**) includes:

- Construction of an approximately 5.6 km gas looping pipeline adjacent to, or co-located within, the existing Port Kembla lateral pipeline easement, with some deviations due to design constraints.
- Construction of a tie-in facility located in Kembla Grange to connect the proposed pipeline to the existing EGP (the EGP tie-in facility). Two options are being considered for the final location of this facility with the final selection based on the outcomes of geotechnical investigations.
- Connection to the approved Port Kembla Gas Terminal tie-in facility located in Cringilla (the AIE tie-in facility).

2.1 Construction

The looping pipeline would be constructed using standard methods for pipeline construction including open trenching and horizontal directional drilling (HDD). Around 3.8 kilometres of the pipeline would be constructed using open trenching. Trenches would be excavated to around two metres below ground level. HDD would be used to construct around 1.8 kilometres of the pipeline where surface constraints such as road and rail infrastructure prevent the use of open trenching.

A 20-metre-wide construction corridor around the pipeline is proposed for workspace and laydown areas, and additional areas have been identified for other construction activities including pipeline segment stringing (see **Figure 2**). Construction of the proposed modification is expected to take around nine months to complete. Works would occur during standard construction hours as specified in the *Interim Construction Noise Guideline* except where permitted by the modified conditions of consent (refer to Section **Error! Reference source not found.** for further information).

A full description of the proposed modification is provided in the Modification Report (see **Appendix A**).

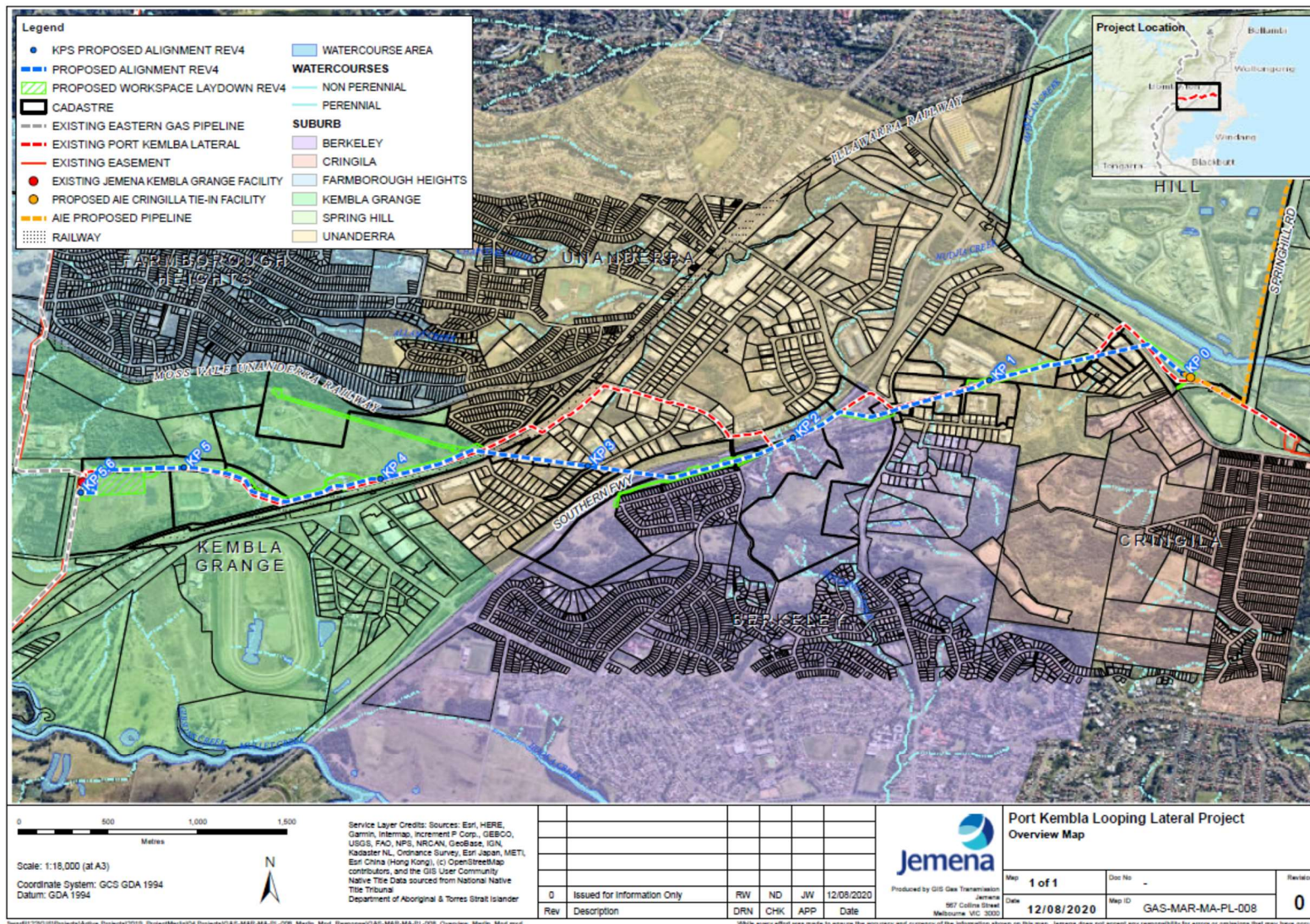


Figure 2 | Port Kembla Lateral Looping Pipeline

2.2 Operations and Decommissioning

The design, construction, commissioning, maintenance, operation and decommissioning of the pipeline lateral, as a component of the EGP, will be regulated under the provisions of the Pipelines Act and Licence 26 conditions. As outlined above, the existing pipeline licence conditions are also deemed to be the approval conditions under the EP&A Act. The licence also requires the licensee (Jemena) to comply with the requirements of *Australian Standard AS2885 – Pipelines Gas and Liquid Petroleum*. The deemed approval (Licence 26) is provided in **Appendix E** (Consolidated Approval) which incorporates as Schedule A the specific conditions recommended for the Port Kembla Lateral Looping Pipeline. The Pipelines Act also includes provisions for easement negotiations and access arrangements with affected landowners.

Jemena will also be required to apply to formally vary Licence 26 prior to construction commencing and additional technical, engineering and operating requirements may be required by the Department's Energy, Climate Change and Sustainability Group who have been closely consulted in relation to the modification application.

3 Statutory context

3.1 Scope of modifications

The looping pipeline would be constructed using standard methods for pipeline construction including open trenching and horizontal directional drilling (HDD). Around 3.8 kilometres of the pipeline would be constructed using open trenching. Trenches would be excavated to around two metres below

The project was transitioned to SSI by order, which took effect by publication in the NSW Government Gazette on 3 May 2019. The proposed modification was lodged under section 5.25 of the EP&A Act which provides for the modification of an SSI approval. The Department is satisfied that proposed modification is consistent with the approved EGP which includes provision for pipeline connection to Port Kembla, with the modification proposing to increase the capacity of the pipeline generally consistent with the existing capacity of the main line EGP.

3.2 Delegated authority

The Minister for Planning and Public Spaces (Minister) is the approval authority for the modification under Section 5.25 of the EP&A Act. However, under the Minister's delegation dated 11 October 2017, the Director, Resource Assessments may determine the modification application as Jemena did not make a political disclosure, Council did not object to the modification, and there were no objections to the modification from the public.

4 Engagement

4.1 Department's engagement

The Department publicly exhibited the modification Report on its website from 20 May to 2 June 2020 and referred the modification request to relevant government agencies for comment. The Department also notified all landowners within the proposed pipeline easement.

The Department received one submission in the form of a comment from a neighbouring business concerned about the proximity of the pipeline to its own approved development activities. Jemena revised the pipeline alignment in this location to avoid conflict with the approved development. Advice was received from six government authorities.

4.2 Key issues raised in agency advice

Wollongong City Council (Council) requested further assessment be carried out on potential impacts to the former Berkeley House archaeological site and biodiversity (including additional mapping of biodiversity constraints).

An Historic Heritage Due Diligence Assessment was completed as part of the Submissions Report provided by Jemena, which identified there would be no direct or indirect impacts to the heritage significance of the item or associated areas of archaeological potential.

Council also raised concerns about the Biodiversity Development Assessment Report (BDAR) including additional vegetation mapping. Following additional consultation regarding offsetting requirements, Council had no further concerns regarding potential heritage and biodiversity impacts.

Transport for NSW (TfNSW) requested design information for the pipeline where it crosses state roads and that further assessment be carried out to assess potential impacts to the road network during construction. Jemena provided design information and indicative construction and operational traffic and access details for the proposed looping pipeline to TfNSW. The Department has recommended conditions to address TfNSW concerns through the preparation of a Traffic Management Plan as a sub-plan under the Construction Environmental Management Plan, in consultation with TfNSW, including Sydney Trains.

Sydney Trains requested geotechnical and other design information and noted works within the rail corridor would be covered under an agreement or deed. The Department notes that Jemena will be required to obtain agreement from Sydney Trains for works within the rail corridor, and the design information would be provided directly to Sydney Trains as part of reaching the agreement.

The **Environment Protection Authority** (EPA) did not raise any concerns, however, recommended a range of standard conditions to address pollution control, waste and contaminated land management protocols, and amenity – such as dust and noise during construction. These recommendations have been incorporated into the Department's recommended conditions.

The Department's **Biodiversity Conservation Division** (BCD) was satisfied with the BDAR and recommended conditions to retire the biodiversity credits for the clearing of 0.37 hectares (ha) of native vegetation. BCD also made a number of recommendations in relation to Aboriginal heritage including unexpected find and notification procedures in the case where Aboriginal heritage items are found during construction work. These have been incorporated into the recommended conditions.

The Department's **Water Group** (DPIE Water) requested additional information on watercourse crossings and provided advice that any take of water would need to be appropriately licensed in accordance with the *Water Management Act 2000* (WM Act). Jemena advised that based on its assessment no take of water would be required but acknowledged that it would seek to obtain a licence if required through the **Natural Resources Access Regulator**. The Department has included a note in the conditions referencing the requirements for water licensing under the WM Act.

Crown Lands did not raise any concerns with the proposed modification.

Links to the public submission, agency advice and Jemena's response to the issues are provided in **Appendix B**.

4.3 Submissions Report

Jemena provided a Submissions Report responding to the issues raised by agencies and the public submission. The Submissions Report included minor amendments to the pipeline route and construction footprint to avoid or reduce impacts to landowners, mapped vegetation and other approved industrial development.

These changes are described in full in the Submissions Report (refer to **Appendix C**).

Following the Submissions Report, Jemena provided additional information in response to further agency comments including additional traffic information, an updated Biodiversity Development Assessment Report and an updated preliminary hazard analysis. This information is provided in **Appendix D**.

5 Assessment

Given the nature of the works and surrounding land uses, the Department considers the key potential impact of the proposed modification to be hazards and risks associated with the pipeline. Other impacts associated with the proposed modification are primarily related to construction.

5.1 Hazard and risk

The key hazard assessment issue is the potential for the risk of a major incident affecting off-site land uses. Land uses in proximity to the pipeline alignment include residential, industrial, commercial and open space. There are no schools, hospitals or other development referred to as sensitive development in *Hazardous Industry Planning Advisory Paper No 4: Risk Criteria for Land Use Planning* (DP&E 2011) (HIPAP 4) within the potential hazardous impact zone of the development.

Jemena undertook a preliminary hazard analysis (PHA) carried out in accordance with the requirements of *State Environmental Planning Policy No 33 – Hazardous and Offensive Development* (SEPP 33) and the Department's *Hazardous Industry Planning Advisory Paper No 6: Hazard Analysis* (DP&E 2011) (HIPAP 6). The PHA identified and modelled the probability and consequence of hazardous events occurring under a range of scenarios based on different environmental and operating conditions. The Department's hazard and risk section reviewed the PHA and determined the assessment was adequate following minor clarifications.

The PHA considers the risk associated with natural gas which can form a flammable mixture on release. Hazards considered in the assessment therefore relate to the following:

- Jet fire – where the rapid ignition of gas results in the formation a high directional flame
- Flash fire – where the delayed ignition of gas results in the ignition of a vapour cloud.

The PHA considered potential fatality, societal (fatality risk to larger populations) and propagation (risks to and from other hazardous infrastructure) risks.

Fatality risk

The PHA assessed the potential level of risk for a jet fire or flash fire incident at the pipeline or the tie-in facility resulting in a fatality against the criteria in **Table 1**.

Table 1 | Acceptable level of risk for fatality (HIPAP 4)

Acceptable level of risk (per annum)	Land use
0.5 in a million (5E-07)	Sensitive land uses (hospitals, schools, child-care facilities, old age housing)
1 in a million (1E-06)	Residential, hotels, motels, tourist resorts
5 in a million (5E-06)	Commercial developments including retail centres, offices and entertainment centres
10 in a million (1E-05)	Sporting complexes and active open space
50 in a million (5E-05)	Industrial

Pipeline

The modelling in the PHA identified that the pipeline does not result in a risk level of one in a million (the relevant criteria for residential areas) at any point on the pipeline. As described above, there are no sensitive developments as described in HIPAP 4 within the potential hazardous impact zone of the pipeline.

Kembla Grange tie-in facility

The PHA assessed both options for the tie-in facility. The modelled risk contours for the two options are shown in **Figure 3** and **Figure 4**. Land uses around the tie-in facility include:

- vacant land immediately to the south and east;
- active open space around 400 metres to the east;
- industrial developments around 150 metres to the north west (recycling facility) and 100 metres to the west (car depot); and
- place of worship located around 450 metres to the north east.

There are no sensitive or residential land uses located within the potential hazardous impact zones for the tie-in facility options.

The nearby active open space area is located outside of the 1E-05 contour and the place of worship is located outside of the 5E-06 contour. The industrial area is located outside the 5E-05 risk contour.

Societal and propagation risk

Given the low risk for individual fatalities described above and that the PHA did not identify areas with the potential for high occupancy along the pipeline or around the tie-in facility, societal risks are considered to be minor.

The Department has recommended a condition to prevent propagation risks.

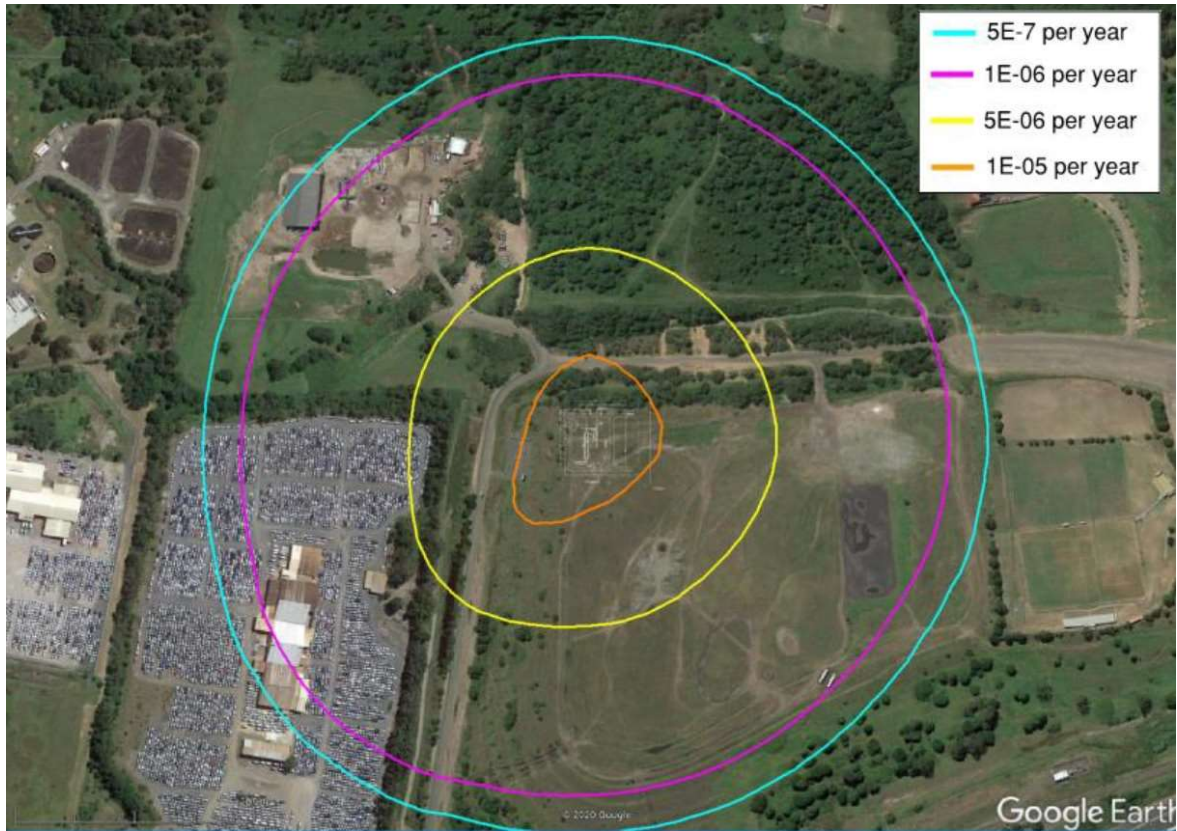


Figure 3 | Kembla Grange Tie-in facility fatality risk contours (Option A)

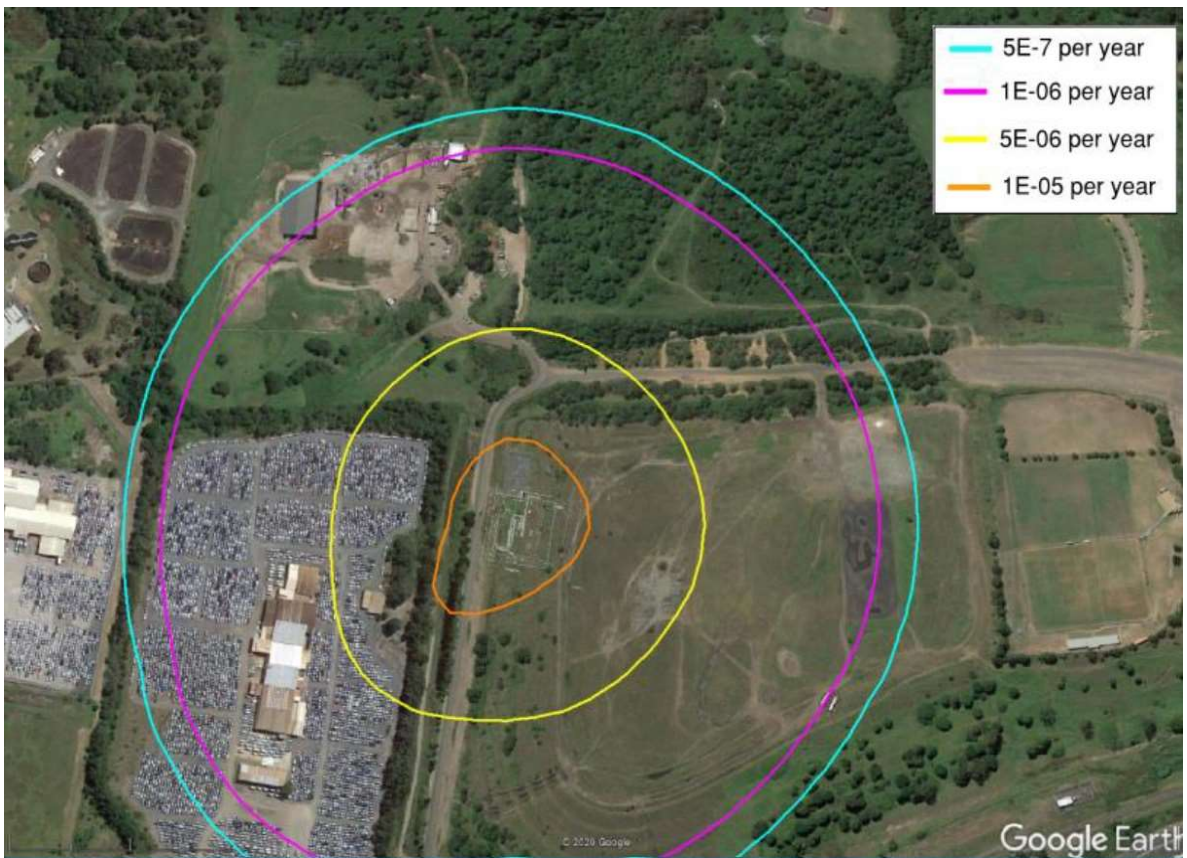


Figure 4 | Kembla Grange Tie-in facility fatality risk contours (Option B)

Summary

The Modification Report as updated by the Submissions Report and additional hazards information in **Appendix D2** included a comprehensive hazards assessment in accordance with the requirements of SEPP 33. The Department is satisfied that the PHA indicates that the pipeline would not pose an unacceptable risk to the environment or people.

Notwithstanding the above, the Department has included conditions requiring Jemena to carry out additional studies based on the final design of the proposed looping pipeline and to prepare or revise a number of safety and emergency plans and studies including:

- a construction safety study, a hazard and operability study and a final hazard analysis prior to construction; and
- an emergency plan and Pipeline Management Plan prior to commencing commissioning.

Consequently, the Department considers the identified safeguards as adequate and that with the implementation of the recommended conditions, the proposed looping pipeline would not significantly increase the risk of hazards to people or the environment.

5.2 Other issues

A summary of the Department's consideration of other impacts is outlined in **Table 2** below.

Table 2 | Assessment of other issues

Issue	Findings	Recommendations
Traffic	<ul style="list-style-type: none"> • Traffic movements during construction would be minor, with indicative maximum daily movements of 40 light vehicles and 12 heavy vehicles at each construction access point per day. This would represent a negligible increase to existing traffic volumes on the road network. • Traffic movements would generally be outside of the morning peak (7.30 – 9.00am) and movements during the afternoon peak (3.30 – 6.00pm) would be limited to around 20 light vehicle movements and one heavy vehicle movement. 	<ul style="list-style-type: none"> • Minimise traffic and pedestrian safety issues and disruption to local users of the transport route/s during construction • Prepare a Traffic Management sub-plan as part of the recommended Construction Environmental Management Plan (CEMP) in consultation with Council, TfNSW (including Sydney Trains).
Biodiversity	<ul style="list-style-type: none"> • 0.37 hectares of native vegetation consisting of the following threatened ecological communities would be impacted by the construction of the pipeline: <ul style="list-style-type: none"> – 0.04 hectares of Coastal Freshwater Wetlands on coastal floodplains of the New South Wales North Coast, Sydney Basin and South East Corner – 0.33 hectares of Illawarra Lowlands Grassy Woodland in the Sydney Basin bioregion. • The proposed modification would also impact 0.9 hectares of planted native vegetation. Offsets would be 	<ul style="list-style-type: none"> • Retire appropriate species credits to offset biodiversity impacts; and • Prepare a Biodiversity sub-plan as part of the recommended Construction CEMP.

Issue	Findings	Recommendations
	<p>secured for the modification in accordance with the NSW Government's Biodiversity Assessment Method.</p> <ul style="list-style-type: none"> The Department has recommended conditions requiring the impacts to be offset. 	
Amenity	<ul style="list-style-type: none"> Construction of the pipeline would generate noise and dust. However, the pipeline would mostly be constructed on industrial land and most construction activities would occur during daytime hours only. A small number of residences located at and around Warwick Street, Berkeley would potentially be affected. However, the impacts would be short term while construction occurs in that area. Visual impacts would generally be limited to the construction of the open-trench sections of the pipeline and the start and end points of the HDD. These impacts would be temporary for the duration of construction. The Department is satisfied that amenity impacts would be temporary and can be appropriately managed through the implementation of the recommended conditions. 	<ul style="list-style-type: none"> Minimise construction noise in accordance with the <i>Interim Construction Noise Guideline</i> (DECC, 2009), or its latest version; Prepare a Noise Sub-plan as part of the CEMP including out-of-hours works protocol; and Minimise the dust generated during construction, including wind-blown and traffic generated dust
Heritage	<ul style="list-style-type: none"> No known Aboriginal items or sites would be impacted by the pipeline, and an Aboriginal Cultural Heritage Due Diligence assessment identified that the looping pipeline would be located in previously disturbed areas where there is low potential to impact unknown Aboriginal heritage items. There are no listed historic heritage items within 150 m of the proposed modification. The former Berkeley House is located 180 m from the proposed pipeline and would not be impacted by construction activities. The Department considers the risk of impacts to Aboriginal and historic heritage items is low. However, it has recommended conditions requiring Jemena to prepare a protocol to manage any unexpected finds. 	<ul style="list-style-type: none"> Prepare an Unexpected Heritage Finds and Human Remains Procedure and incorporate into the CEMP.
Contamination	<ul style="list-style-type: none"> A Preliminary Site Investigation Report was prepared as part of the Modification Report. The investigation identified potential sources of contamination that may be disturbed during construction including uncontrolled fill, previously demolished buildings and fly-tipped waste with the potential to contain asbestos containing material. Potential acid sulfate soils are limited to two areas of mapped Class 5 acid sulfate soils. Jemena has commenced field investigations for detailed contamination and geotechnical assessments. 	<ul style="list-style-type: none"> Ensure the Port Kembla Lateral Looping Pipeline is constructed to minimise the potential for contaminant mobilisation; and Prepare an Unexpected Contaminated Land Finds Procedure and incorporate into the CEMP.

Issue	Findings	Recommendations
Water Resources	<ul style="list-style-type: none"> Excavation for the construction of the proposed modification has the potential to impact nearby waterways as a result of erosion and sedimentation. Jemena proposes to manage impacts through the implementation of standard sediment and erosion control measures. Jemena advise that there would be no or minimal take of water that would require water licensing under the WM Act. However, would seek to obtain necessary licenses if required. The pipeline corridor only traverses a number of minor (ephemeral) streams. As this is an SSI project, controlled activity approvals (CAA) under the WM Act are not required. However, Jemena should undertake any works in watercourses generally in accordance with best practice management measures identified in relevant CAA guidelines, such as “<i>Guidelines for laying pipes and cables in watercourses on waterfront land</i>” and “<i>Guidelines for instream works on waterfront land</i>” 	<ul style="list-style-type: none"> Ensure construction and operation of the pipeline does not result in water pollution; and Minimise any soil erosion in accordance with the relevant requirements in the <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004) Minimise impacts in watercourses and adopt relevant management measures guided by CAA guidelines. Note in the recommended conditions advising that any take of water would need to be undertaken in accordance with the requirements of the WM Act.
Waste	<ul style="list-style-type: none"> Suitable excavated material from open trenching would be used as backfill. Other potential waste streams generated during construction include contaminated and uncontaminated spoil, contaminated and uncontaminated rinse water from decontamination of field equipment, and recyclable and non-recyclable material. The Department has recommended conditions to ensure the waste generated during constructions is appropriately managed. 	<ul style="list-style-type: none"> Prepare a Waste Sub-plan as part of the CEMP. Minimise waste generated and classify all waste in accordance with the EPA’s <i>Waste Classification Guidelines 2014</i>; and remove all waste from the site corridor as soon as practicable, and ensure it is sent to an appropriately licensed waste facility for disposal.
Social and economic	<ul style="list-style-type: none"> The Port Kembla Gas Terminal has the potential to increase the security, reliability and affordability of gas in NSW. The proposed modification would alleviate gas supply constraints between the approved Port Kembla Gas terminal and the EGP and would facilitate the supply of more gas to the market. 	No specific conditions

6 Evaluation

The looping pipeline would increase the capacity of the existing Port Kembla lateral and facilitate the transfer of up to 115 PJ of gas per year from the approved Port Kembla Gas Terminal to the EGP.

While there would be some impacts associated with the modification, the Department considers that these impacts would not be significant.

The preliminary hazard assessment identified that the pipeline could be constructed and operated without significant risk to people or the environment, and that any residual risk could be mitigated and/or managed through appropriate measures outlined in the final hazard analysis and safety and emergency plans required by the recommended conditions.

Construction of the pipeline would generate additional traffic, noise, dust and waste, disturb some native vegetation, and potentially disturb contaminated or acid sulphate soils.

However, the Department notes that the amenity impacts would occur for a relatively short period of time as construction progressed along the length of the pipeline alignment, and the recommended conditions require Jemena to offset the biodiversity impacts.

Further, Jemena has committed to implementing environmental management and mitigation measures to minimise the impacts, and the Department considers that with the identified safeguards and recommended conditions, the potential impacts can be appropriately managed.

The Department is satisfied that the issues raised by the public authorities and one private organisation have been appropriately considered and responded to by Jemena and any residual issues can be appropriately mitigated or managed through the Department's recommended conditions of consent.

The modification would facilitate the operation of the Port Kembla Gas Terminal project at full capacity and realise the benefits associated that project for the NSW gas market. The Department considers the modification to be in the public interest and that the benefits of the proposed looping pipeline outweigh its impacts, and the modification should be approved, subject to the recommended conditions.

7 Recommendation

It is recommended that the Director – Resources Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report
- **determines** that the application SSI 9973 MOD1 falls within the scope of section 5.25 of the EP&A Act
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification
- **modify** the approval SSI 9973
- **signs** the attached Notice of Modification (see **Appendix F**).

Recommended by:



Jack Turner 7/10/2020

Senior Environmental Assessment Officer

Resource Assessments

Recommended by:



Rose-Anne Hawkeswood

Team Leader

Resource Assessments

8 Determination

The recommendation is **Adopted / Not adopted** by:



8/10/2020

Stephen O'Donoghue

Director

Resource Assessments

as delegate of the Minister for Planning and Public Spaces

Appendices

Appendix A – Modification Report

Appendix B – Submissions and Agency Advice

Appendix C – Submissions Report

Appendix D – Additional information

Table D | Additional information

Appendix	Information
D1	Memorandum - SSI-9973-Modification 1 – Port Kembla Looping Lateral – Response to Transport for NSW Request for Further Information (Jemena, 30 September 2020)
D2	Port Kembla Lateral Looping NGP2 Pipeline FEED Preliminary Hazard Analysis- NPG2 and Kembla Grange Tie-in Facility (WorleyParsons, 6 October 2020)
D3	Port Kembla Lateral Looping Project Biodiversity Development Assessment Report (Biosis, 24 September 2020)

Appendix E – Consolidated Approval

Appendix F – Notice of Modification

For all Appendices see the Department's website at <https://www.planningportal.nsw.gov.au/major-projects/project/26196>