

# Eastern Gas Pipeline Modification 2

Transfer of Port Kembla Gas Terminal Pipeline Segment and Addition of Cringila Lateral Pipeline State Significant Infrastructure Modification Assessment (SSI 9973 MOD 2)

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## **Executive Summary**

Jemena Gas Networks (NSW) Ltd (Jemena) owns and operates the Eastern Gas Pipeline, an approximately 797-kilometre gas pipeline connecting Victoria and New South Wales. Jemena is seeking a modification of the Eastern Gas Pipeline infrastructure approval to transfer an approved pipeline segment from the Port Kembla Gas Terminal project to the Eastern Gas Pipeline approval and to incorporate minor alignment changes and a new 200 metre nitrogen supply pipeline.

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. In 2018, Australian Industrial Energy received approval for the Port Kembla Gas Terminal to import liquified natural gas, convert it to natural gas and transport it to Cringila via a pipeline for onward distribution to the NSW market via the Eastern Gas Pipeline. The Port Kembla Lateral Looping pipeline and Port Kembla Gas Terminal construction have not commenced.

The Department made the modification report public on its website and referred the modification request to relevant government agencies for advice.

As the modification is also seeking to increase the operating pressure along the transferred section of pipeline. The risk of a major incident affecting neighbouring land uses is the primary hazard associated with the proposed modification. The hazard analysis concluded that the operation of the proposed pipelines would comply with the relevant criteria for acceptable risk to people, property, or accident propagation. The Department considers that the current conditions of approval can adequately manage the hazard risk, provided the relevant studies and plans are updated to include the proposed modification.

The Department considered the potential impact of the proposed modification on Aboriginal cultural heritage and historic heritage and the submission provided by Wollongong City Council. The proposed modification would not impact any known Aboriginal cultural heritage or historic heritage sites. The Department considers that the unexpected finds protocol required by the current conditions of approval can adequately manage the residual risk of impacts to unidentified features.

The Department considers that the proposed modification is unlikely to significantly impact amenity, traffic, waste, soils, or biodiversity. The Department recommends the Construction Environmental Management Plan required by the current conditions of approval is updated to include the proposed modification and the mitigation and management measures proposed by Jemena in the modification report.

The Department has assessed the merits of the proposed modification and the impacts during construction and operation. The Department has considered the advice provided by public authorities and the response provided by Jemena. The Department is satisfied that the residual issues can be appropriately mitigated or managed through the Department's recommended conditions of approval.

The proposed modification would facilitate the operation of the Port Kembla Gas Terminal by enabling the streamlined construction and operation of the gas pipeline connection by Jemena. The Department considers that the proposed modification is in the public interest, that the benefits of the proposed modification outweigh its potential impacts and, subject to the recommended conditions the proposed modification, should be approved.

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## 1 Introduction

Jemena Gas Networks (NSW) Ltd (Jemena) owns and operates the Eastern Gas Pipeline which transports natural gas from Longford, Victoria, to Horsley Park, New South Wales. The Eastern Gas Pipeline infrastructure approval incorporates several lateral pipelines, including the Port Kembla Lateral Looping pipeline in the Wollongong local government area. The proposed modification would connect the Eastern Gas Pipeline with the future Port Kembla Gas Terminal.

This report details the Department's assessment of the proposed modification application and provides recommendations to manage the proposal's potential environmental impacts.

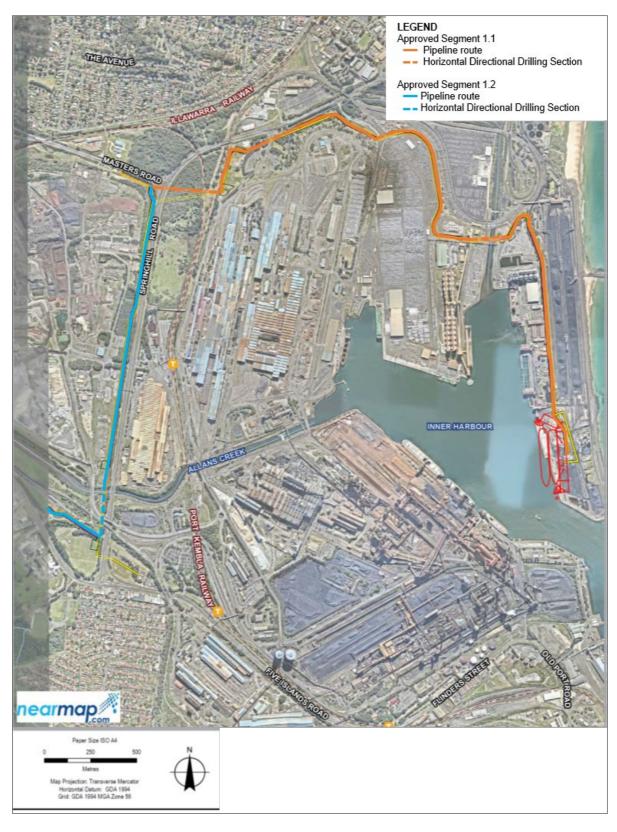
#### 1.1 Background

In 2018, the then Minister for Planning and Public Spaces granted infrastructure approval for the Port Kembla Gas Terminal, a liquified natural gas (LNG) import terminal in Port Kembla. When constructed, the Port Kembla Gas Terminal will receive shipments of LNG, convert the LNG to gas, and supply the gas to the NSW market via the Eastern Gas Pipeline.

The Minister had previously determined that the Port Kembla Gas Terminal was essential to the State for economic reasons because it would be capable of providing up to 70% of NSW's gas needs and increase the security, reliability, and affordability of gas in NSW. Accordingly, the Minister declared the project to be Critical State Significant Infrastructure (CSSI).

The Port Kembla Gas Terminal project includes an approximately 6.3 kilometre (km) long gas pipeline to convey gas from the terminal to the Port Kembla Lateral pipeline. The pipeline is approved to connect to the Port Kembla Lateral pipeline at Cringila (see **Figure 1**).

In 2020, the approval for the Eastern Gas Pipeline was modified to duplicate the Port Kembla Lateral pipeline (i.e. to allow construction and operation of the Port Kembla Lateral Looping Pipeline) to increase the gas throughput capacity to accommodate the gas from the Port Kembla Gas Terminal. Construction of the duplicate pipeline has not yet commenced (see **Figure 2**).



**Figure 1** | Pipeline alignment approved under SSI 9471 (Source: Modified from GHD (2018) Port Kembla Gas Terminal Response to Submissions Report)

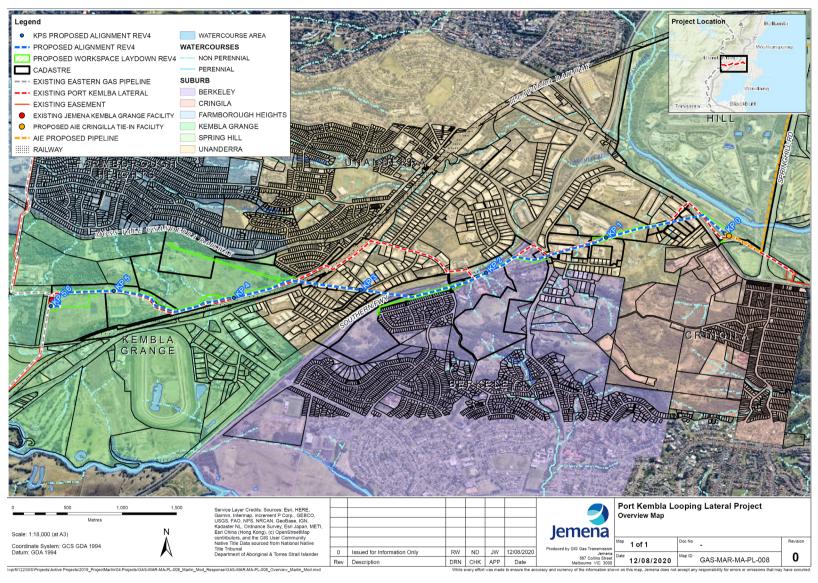


Figure 2 | Approved Port Kembla Lateral Looping Pipeline

# 2 Proposed modification

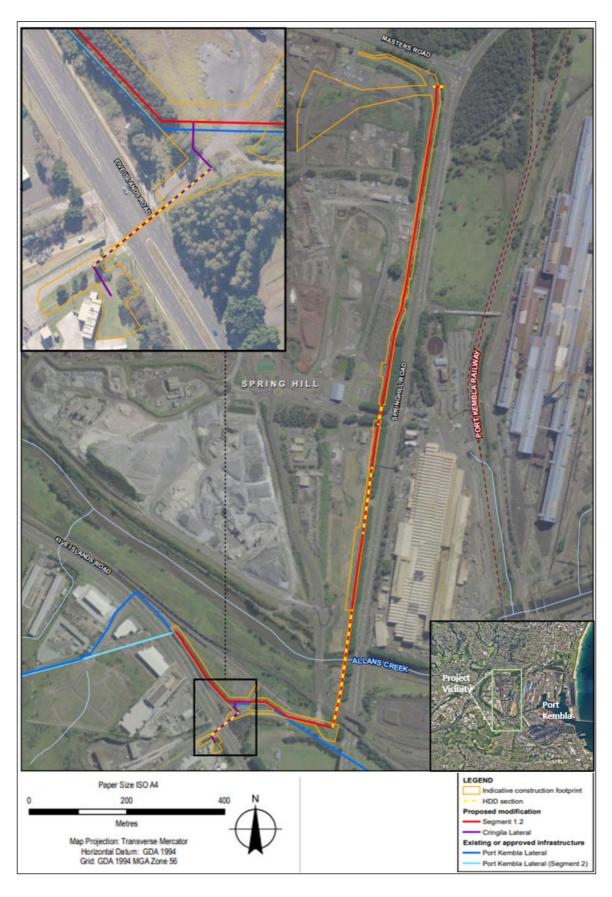
Jemena is seeking a modification to the Eastern Gas Pipeline approval under Section 5.25 of the *Environmental Planning and Assessment Act 1979* to:

- transfer part of the approved gas pipeline for the Port Kembla Gas Terminal (SSI 9471) to the Eastern Gas Pipeline approval (SSI 9973);
- include minor pipeline alignment changes and additional area for pipeline stringing;
- include a new 200 metre (m) pipeline (the Cringila Lateral Pipeline) to connect to the Port Kembla Lateral Looping Pipeline to supply nitrogen to the pipeline; and
- increase the maximum operating pressure and nominal pipeline diameter.

The proposed modification is illustrated on **Figure 3**. Details of the proposed modification are outlined below in **Table 1**. The modification report is available on the Department's Major Projects Portal (see **Appendix A1**).

**Table 1: Proposed Modification** 

Description	Current approval (Figures 1 and 2)	Proposed modification (Figure 3)
Transfer of Pipeline	<ul> <li>Approved as part of Port Kembla Gas Terminal (SSI 9471)</li> <li>Australian Industrial Energy Pty Ltd (Australian Industrial Energy) constructs and operates</li> <li>Combination of trench and trenchless construction methods</li> </ul>	<ul> <li>Transfer approval for part of the pipeline (identified in Figure 1 as Segment 1.2) to Eastern Gas Pipeline Approval (SSI 9973)</li> <li>Jemena constructs and operates</li> <li>No change to construction methods</li> <li>Stringing area and right of way for construction</li> </ul>
Alignment of Port Kembla Lateral Looping pipeline	<ul> <li>Alignment of Segment 1.2 pipeline shown on Figure 1</li> </ul>	<ul><li>Minor alignment changes (Figure 3)</li></ul>
Cringila Lateral Pipeline	Not currently approved	<ul> <li>200 m section of pipeline</li> <li>Supply nitrogen gas to Port Kembla Lateral Looping Pipeline</li> <li>Minor infrastructure incorporated</li> <li>Located within BOC Limited property but owned and operated by Jemena</li> </ul>
Pipeline design	<ul> <li>Operate with a maximum pressure of 12 megapascals (Mpa)</li> </ul>	<ul> <li>Operate with a maximum pressure of 16.55 Mpa and increase nominal diameter to 450 millimetres (mm)</li> </ul>



**Figure 3** | Proposed Modification to Port Kembla Lateral Looping Pipeline (Source: GHD (2021) Eastern Gas Pipeline Modification 2, modification report (HDD - Horizontal Directional Drilling)

## 3 Statutory context

#### 3.1 Scope of Modification

In accordance with section 5.25 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act), a proponent may request the Minister to modify the approval for State significant infrastructure. The Minister's approval under section 5.25 of the EP&A Act is required for the proposed modification as it is not consistent with the existing approval for the following reasons:

- the Segment 1.2 Pipeline was approved under SSI 9471 and Jemena is seeking to undertake construction and operation of the pipeline under SSI 9973
- the Cringila Lateral Pipeline is a new section of pipeline that was not assessed or approved under SSI 9973 MOD 1.

#### 3.2 Delegated authority

The Minister is the approval authority under section 5.25 of the EP&A Act. However, under the Instrument of Delegation dated 9 March 2022, the Director, Resource Assessments may determine the application as:

- Council did not object to the proposed modification
- · Jemena did not make a political disclosure
- there were no public submissions.

#### 3.3 Other Approvals

The proposed modification would need approval under Section 138 of the *Roads Act 1993* for all works in, on or over a public road.

## 4 Engagement

#### 4.1 Department's engagement

Under section 5.28(1)(g) of the EP&A Act, the Planning Secretary is required to make requests for modification of approvals determined by the Minister publicly available. Accordingly, the Department made the modification request publicly available on its website and referred the modification request to relevant government agencies for comment.

The Department received one submission from a neighbouring business which was subsequently withdrawn by the submitter. Advice was received from four government agencies.

#### 4.2 Jemena's engagement

Australian Industrial Energy conducted stakeholder consultation for the Port Kembla Gas Terminal, incorporating the Segment 1.2 pipeline, including public exhibition of the EIS, community meetings and the distribution of consultation materials. Jemena conducted similar stakeholder consultation with landholders, interest groups, community bodies and public agencies as part of the Port Kembla Lateral Looping Pipeline modification.

The Department is satisfied with the previous consultation undertaken and did not require additional consultation for the proposed modification.

#### 4.3 Key Issues raised in agency advice

Key issues raised in agency advice is outlined below in Table 2 and provided in Appendix A2

Table 2 | Agency Advice

Agency	Agency advice		
Wollongong City Council (Council)	<ul> <li>Proximity to Berkley House should be considered in the modification report</li> <li>Recommended additional consultation with the Illawarra Local Aboriginal Land Council and Heritage NSW</li> </ul>		
Transport for NSW (TfNSW)	<ul> <li>Proponent should provide detailed pipeline route information</li> <li>Proponent should provide strategic design for all works within the road reserve and classified road crossings</li> <li>Assessment of the proposed pipeline in accordance with RMS Technical Direction: Trenchless Excavation within the Easement of Roads and Maritime Infrastructure</li> <li>Following further consultation, TfNSW recommended conditions requiring the proponent to:         <ul> <li>apply for and obtain consent from TfNSW under Section 138 of the Roads Act 1993</li> <li>apply for and obtain a Road Occupancy Licence from the TfNSW Operations Unit prior to commencing roadworks on a State road, impacting a travel land or the operation of traffic signals</li> <li>design and construct the pipeline under Five Islands Road and any other work within a classified road to the satisfaction of TfNSW and TfNSW standards</li> <li>reinstate any disturbances to traffic lanes, shoulders, verges or other disturbances within the road reserve of classified roads to pre-existing or better condition, with written confirmation to be obtained from TfNSW to verify the completion.</li> </ul> </li> </ul>		
NSW Environment Protection Authority (EPA)	<ul> <li>No additional comments, previous comments for MOD 1 SSI 9973 are relevant</li> </ul>		
DPE – Biodiversity Conservation and Science (BCS)	<ul> <li>No additional comments, current conditions for mitigation approved under MOD 1 SSI 9973 are sufficient.</li> </ul>		

#### 4.4 Response to Agency Advice

On 8 March 2022, Jemena provided a response to agency advice (see **Appendix A3**) which:

- provided additional detail regarding potential impacts to the road reserves and Allans Creek;
- reiterated that the impacts of the proposed modification would be consistent with the traffic assessments undertaken for the Port Kembla Gas Terminal and Port Kembla Lateral Looping Pipeline and no further mitigation or management measures are required; and
- indicated that additional design details would be provided as part of the approval process under the *Roads Act 1993*.

Following Jemena's response, TfNSW requested further information to clarify the pipeline crossing at watercourses along Springhill Road and to assess the proposal against Figure 1 of the RMS Technical Direction: Trenchless Excavation within the Easement of Roads and Maritime Infrastructure.

Jemena provided the following clarification in response to TfNSW's additional advice:

- the pipeline is located on Blue Scope Steel owned land along Springhill Road, and would only enter the road reserve when crossing Five Islands Road; and
- geotechnical information needed to assess the pipeline construction against Figure 1 of the RMS
  Technical Direction is not yet available and would be provided in the application for the pipeline
  under Section 138 of the Roads Act 1993.

Jemena's response also addressed the issues raised by Council, noting that:

- the proposed pipelines are not located near heritage listed items;
- consultation with Illawarra Local Aboriginal Land Council and the Office of Environment and Heritage
  was undertaken as part of the Port Kembla Gas Terminal assessment to confirm the level of
  assessment and consultation required; and
- the pipeline routes were designed to avoid known historic and Aboriginal heritage items.

The response did not propose any changes to the modification in response to agency advice.

Council provided a further response to the clarification reiterating the need for consultation with Illawarra Local Aboriginal Land Council and Heritage NSW. The Department has considered this matter further in **Section 6** below. Council also provided further advice relating to the requirements for works in the road reserve. However, the proposed modification would not affect Council assets as it would be located on private land, except for the crossing at Five Islands Road, which is a TfNSW asset.

## 5 Assessment

The Department has undertaken a detailed review of the modification report for the Eastern Gas Pipeline Mod 2 (**Appendix A1**). The Department also considered agency advice provided by Council, TfNSW, the EPA, and BCD (**Appendix A2**) and Jemena's response to agency advice (**Appendix A3**).

The Department notes that the modification is largely a transfer of an already approved pipeline segment from the Port Kembla Gas Terminal infrastructure approval to the Eastern Gas Pipeline infrastructure approval. This would allow the segment of the pipeline to be incorporated into Jemena's east coast gas network and to be regulated under the existing Eastern Gas Pipeline licence under the *Pipelines Act 1967*.

The Department considers that the key assessment issue is related to hazards associated with the proposed increase in the operating pressure as this would change the risk profile associated with release and potential ignition of gas, along with the inclusion of the additional nitrogen supply pipeline. The Department's assessment of hazards is summarised in **Section 5.1** below.

The transfer of the pipeline from the Port Kembla Gas Terminal to the East Gas Pipeline project would not significantly change the already approved impacts, including on traffic, noise, air biodiversity and heritage. The Department's assessment on these other impacts is summarised in **Section 5.2** below.

#### 5.1 Hazard and Risk

The risk of a major incident affecting neighbouring land uses is the key hazard associated with the proposed modification. The proposed pipeline route is surrounded by commercial and industrial land, with the closest residential area approximately 300 m to the south of Segment 1.2.

Jemena prepared a Final Hazard Analysis in accordance with the Department's *Hazardous Industry Planning Advisory Paper No 6: Hazard Analysis* (DP&E 2011) (HIPAP 6). The quantitative Final Hazard Analysis, incorporating the proposed pipeline sections was prepared to satisfy existing approval conditions under SSI 9973. The Department's hazards unit reviewed the hazard assessment for the modification and concluded that it met the requirements of HIPAP 6.

The hazard analysis assessed loss of containment consequences for natural gas including:

- rapid ignition resulting in the formation of a jet fire, which is highly directional and would potentially generate significant levels of radiant heat due to efficient burning; and
- delayed ignition that could result in the formation of a flash fire, and if sufficient congestion is present, a vapour cloud explosion.

Using a conservative approach, the hazard analysis considered the Cringila nitrogen injection facility and lateral pipeline as potentially containing flammable gas.

The hazard analysis compared the consequences of an event against risk criteria derived from Hazardous Industry Planning Advisory Paper No 4 – Risk Criteria for Land Use Safety Planning (HPAP No.4), including:

- location specific individual risk (fatality risk)
- · injury risk; and
- risk of property damage and accident propagation

#### **Location Specific Individual Risk**

The hazard analysis assessed the location specific injury risk against the criteria listed in Table 3.

Table 3 | Acceptable level of risk for fatality (HIPAP 4)

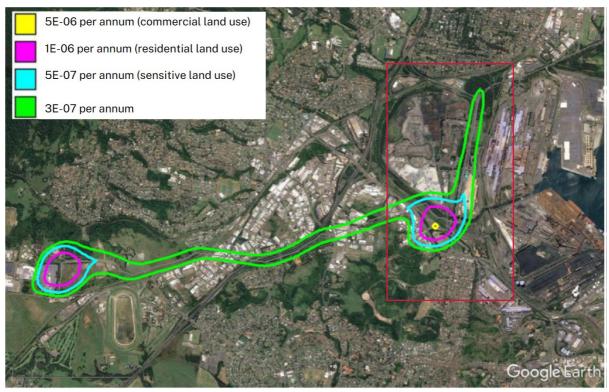
Acceptable level of risk (per annum)	Land use
0.5 in a million (5E-07)	Sensitive land uses (hospitals, schools, child-care facilities, old age housing)
1 in a million (1E-06)	Residential, hotels, motels, tourist resorts
5 in a million (5E-06)	Commercial developments including retail centres, offices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

**Figures 4** and **5** below illustrate location-specific individual risk contours for the proposed pipelines and the Port Kembla Lateral Looping Pipeline. The model indicated that the risk exposure for the proposed modification would be below the fatality risk criteria in **Table 3** for the relevant land uses. No

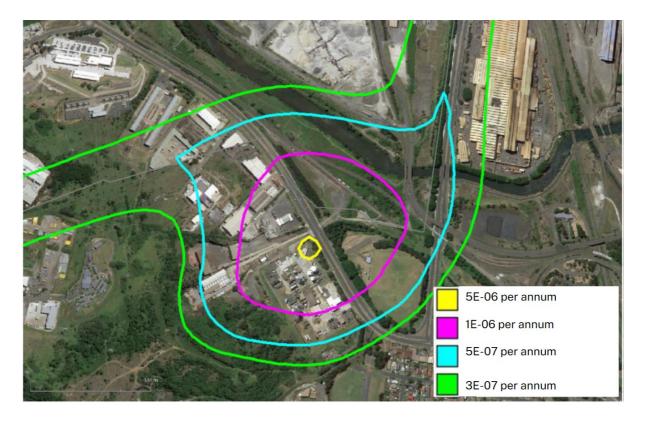
sensitive land uses occur within the areas with a fatality risk greater than the HIPAP 4 criterion of 5E-07 per annum.

**Figures 4** and **5** include a risk contour for 3E-07 per annum to demonstrate the model output and predicted risk level along the length of the proposed pipelines. A risk criterion of 3E-07 is below all HIPAP 4 criteria outlined in **Table 3**.

The hazard assessment used a conservative approach by considering the Cringila Lateral tie-in infrastructure as potentially containing flammable gas (up to the BOC tie in point). The higher probability of ignition model produced a slightly higher risk for the Cringila Lateral tie-in infrastructure, with a localised area showing more than a 5E-06 per annum risk level (refer to **Figure 5**). However, the land within this contour is used for industrial purposes and the level of risk complies with the HIPAP 4 criterion for industrial land uses.



**Figure 4** | Location specific individual risk contours – Port Kembla Lateral Looping Pipeline (Source: Worley (2021) Port Kembla Gas Terminal to Eastern Gas Pipeline – Final Hazard Analysis)



**Figure 5** | Location specific individual risk contours – Cringila nitrogen facility and lateral pipeline (Source: Worley (2021) Port Kembla Gas Terminal to Eastern Gas Pipeline – Final Hazard Analysis)

#### Injury Risk, Property Damage and Accident Propagation

The hazard analysis also considered injury risk defined by radiant heat impact criterion 4.7 kW/m² and property damage criterion 23kW/m² at a frequency of less than 5E-05 in residential and sensitive land uses. The hazard analysis did not identify risks exceeding the HPAP No.4 criteria. The Department's hazard unit advised that the proposed modification demonstrated compliance with propagation risk and injury risk criteria.

#### **Summary**

The proposed modification would not increase unacceptable risks to the environment or people. The Department's hazard unit noted that no additional hazard-related conditions were required, and the existing conditions should incorporate the proposed additional pipeline segments. The Department considers that the current conditions of approval are adequate, provided that all plans and studies are updated to include the proposed modification.

#### 5.2 Other Issues

A summary of the Department's consideration of other impacts is outlined in **Error! Reference** source not found.4 below.

Table 4 | Assessment of other issues

Issue	Findings	Recommendation
Amenity - Noise	<ul> <li>The modification report includes a noise assessment which compared the potential noise impacts of the proposed modification with the predicted noise levels presented in the Port Kembla Gas Terminal noise assessment.</li> <li>The noise assessment concluded most receivers would experience noise below the noise management levels (NMLs) set in the <i>Interim Construction Noise Guideline</i>. One industrial receiver would experience noise 7 dB above the NMLs, and three residential receivers would experience noise 2 to 3 dB above the NMLs during standard construction hours.</li> <li>Jemena may need to undertake out-of-hours work. The current conditions of approval for the Eastern Gas Pipeline include the preparation of an out-of-hours work protocol as part of the construction environmental management plan.</li> <li>Jemena has committed to implementing the same noise mitigation and management measures in the Port Kembla Gas Terminal EIS.</li> <li>The EPA was consulted and advised that existing noise mitigation and management measures were adequate.</li> <li>The Department concludes that noise amenity impacts would be temporary and can be adequately managed by the proposed mitigation measures and recommended noise management conditions.</li> </ul>	Update existing construction environmental management plan to include mitigation measures outlined in the modification report.
Amenity – Air Quality	<ul> <li>The proposed modification is not expected to result in any significant changes to potential air quality impacts of the Eastern Gas Pipeline.</li> <li>Jemena is required prepare a construction environmental management plan by the current Eastern Gas Pipeline conditions of approval.</li> <li>The Department considers that the proposed mitigation measures and current conditions of approval are adequate to manage the potential air quality impacts of the proposed modification.</li> </ul>	No additional conditions recommended.
Heritage	<ul> <li>The Port Kembla Gas Terminal EIS included a detailed Aboriginal Heritage Due Diligence Assessment (AHDDA) and historic heritage assessment (HHA) in line with the Department's SEARs and the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH, 2010).</li> <li>No known Aboriginal cultural heritage or historic heritage sites occur within the proposed pipeline footprint and setback. The proposed pipeline route avoids areas of archaeological potential identified by the AHDDA for the Port Kembla Gas Terminal. The modification report - Heritage Update Report did not identify any significant impacts on tangible or intangible heritage values.</li> <li>Council advised that Jemena should consult NSW Heritage and Illawarra Local Aboriginal Land Council (ILALC). Jemena's response advised that the Port Kembla Gas Terminal EIS and Eastern Gas Pipeline Mod 2 Report included the consultation with NSW Heritage and ILALC.</li> </ul>	No additional conditions recommended.

Issue	Findings	Recommendation
Heritage (cont)	<ul> <li>The Department considers further consultation for the proposed modification with the Aboriginal community or NSW Heritage is not required. The proposal is primarily administrative, transferring an approved pipeline between infrastructure approvals. The industrial location of the proposed Cringila Lateral is highly likely to limit impacts on Aboriginal cultural heritage and historic heritage.</li> <li>The current conditions of approval include the requirement for an unexpected finds protocol for heritage and human remains.</li> <li>The Department considers the risk of the proposed modification impacting Aboriginal cultural heritage or historic heritage is minimal. The Department considers the current conditions of approval are adequate.</li> </ul>	
Biodiversity	<ul> <li>The Biodiversity Update Report prepared for the proposed modification assessed the biodiversity values in areas that were not included in the Port Kembla Gas Terminal Biodiversity Development Assessment Report (BDAR).</li> <li>The proposed modification would result in the removal of planted vegetation that does not contain important habitat for threatened species and does not require offsets.</li> <li>The Biodiversity Update Report identified a minor increase in potential temporary impacts to Green and Golden Bell Frog breeding habitat (PCT1071) from the proposed pipeline stringing area in comparison to the Port Kembla Gas Terminal BDAR. However, Jemena has refined the construction footprint identified in the Biodiversity Update Report and the revised pipeline stringing area would be generally consistent with the credit obligations calculated in the Port Kembla Gas Terminal BDAR.</li> <li>The Port Kembla Gas Terminal BDAR concluded the pipeline stringing area would result in temporary impacts to a very small area (0.008ha) of PCT1071 Phragmites australis and Typha orientalis coast freshwater wetland that is also potential Green and Golden Bell Frog breeding habitat. The credit requirement was calculated as part of PCT1326 as the minimum calculable impact area is 0.1ha. Australian Industrial Energy has retired the required biodiversity credits and met the offset obligations for the Port Kembla Gas Terminal under Section 6.30(1) of the Biodiversity Conservation Act 2016 (BC Act).</li> <li>Under Section 7.17(2)(c) of the BC Act, a BDAR is not required to be submitted if the consent authority is satisfied the modification would not increase impacts on biodiversity values.</li> <li>The Department consulted BCD and BCD advised that the existing mitigation measures and approval conditions in the Eastern Gas</li> </ul>	Modify the CEMP condition of approval to include the mitigation measures identified in the Biodiversity Update Report.
	mitigation measures and approval conditions in the Eastern Gas Pipeline approval would be adequate to manage biodiversity impacts.  The Department recommends the construction environmental management plan (CEMP) incorporates mitigation measures	

identified in the modification report - Biodiversity Update Report.

Issue	Findings	Recommendation
Land - acid sulfate soils	<ul> <li>The Port Kembla Gas Terminal EIS identified the potential for acid sulphate soils to occur within the pipeline route.</li> <li>Jemena has adopted the mitigation measures proposed by the Port Kembla Gas Terminal EIS to prepare an Acid Sulfate Soils Management Plan in accordance with the Acid Sulfate Soils Manual 1998.</li> <li>The Department is considers the proposed Acid Sulfate Soils Management Plan could adequately manage the risk of contamination from acid sulfate soils.</li> </ul>	Modify the CEMP condition of approval to include a soil and water management subplan incorporating an Acid Sulfate Soils Management Plan, to be prepared in accordance with the Acid Sulfate Soils Manual 1998.
Land - contamination	<ul> <li>The construction of the proposed pipeline has the potential to disturb contaminated land. The modification report notes that the Port Kembla Gas Terminal EIS identified several areas along the proposed pipeline route with potential contamination due to current and historical industrial land uses.</li> <li>The Department considers that the current condition of approval requiring Jemena to prepare an Unexpected Contaminated Land Finds procedure could adequately manage the risks to human health and the environment from contaminated land.</li> </ul>	No additional conditions recommended.
Water	<ul> <li>The proposed modification is likely to have minimal impact on water quality, availability, or water flow.</li> <li>The Department notes that the Port Kembla Gas Terminal EIS identified groundwater levels between 4.5 and 8.2 metres below ground level. If groundwater is likely to be intercepted, Jemena proposes to undertake a groundwater quality assessment of those sections to inform construction management.</li> <li>The Department recommends that the condition of approval requiring a CEMP be modified to include a soil and water management subplan that addresses the groundwater assessment and management process proposed by Jemena.</li> </ul>	Modify the CEMP condition of approval to include a soil and water management subplan
Community and Economic	<ul> <li>The proposed modification is not expected to impact public health, safety, social capital, or housing.</li> <li>Temporary disruption to public areas adjacent to Centenary Park, Cringila is predicted, with the potential noise, air, and access impacts.</li> <li>However, the Department considers that the temporary disruption to the community can be managed.</li> <li>The Department considers that the proposed modification would facilitate the predicted economic benefits of the Eastern Gas Pipeline.</li> </ul>	No additional conditions recommended.

Issue	Findings	Recommendation
Traffic	<ul> <li>The proposed Segment 1.2 pipeline route is on privately owned land adjacent to Springhill Road. The proposed Cringila Lateral pipeline would cross Five Islands Road using horizontal directional drilling.</li> <li>Jemena's response to agency advice noted that horizontal directional drilling would minimise disruption at Five Islands Road.</li> <li>Jemena is required to obtain an authorisation from TfNSW under Section 138 of the Roads Act 1993 to undertake works within the public road reserve and has committed to providing the geotechnical information required by TfNSW.</li> <li>The existing conditions require Jemena to prepare a traffic management plan as part of the CEMP in consultation with Council, Sydney Trains, and TfNSW.</li> </ul>	Include a condition of approval requiring Jemena to demonstrate how the works within the road reserve would be consistent with Technical Direction: Trenchless Excavation within the Easement of Roads and Maritime Infrastructure
Waste	<ul> <li>Construction of the proposed modification would generate excavation and general construction waste.</li> <li>Jemena proposes to prepare a waste management plan to manage construction waste.</li> <li>The Department considers that the existing approval conditions under SSI 9973 and the proposed mitigation measures outlined in the modification report can adequately manage the potential impact of the proposed modification.</li> </ul>	No additional conditions recommended.

### 6 Evaluation

The proposed modification would provide for streamlined construction and operation of the Port Kembla Lateral Looping Pipeline and its connection to the future Port Kembla Gas Terminal, a Critical State infrastructure project.

The transfer of the pipeline approval between the infrastructure approvals is primarily administrative, although the application does include additional construction footprint areas and a new 200 m nitrogen pipeline.

The modification report assessed the potential environmental impacts of these areas, concluding the proposed modification would result in minor impacts on the environment and people. The modification report did not identify any substantial changes to the Port Kembla Gas Terminal EIS conclusions.

The final hazard analysis identified that the proposed modification does not pose a significant risk to people or the environment. The Department recommends the current hazard and risk conditions of approval be modified to include the proposed modification.

The proposed modification would generate noise amenity impacts during construction. One industrial receiver and three residential receivers would experience noise above the noise management levels. Construction of the proposed pipelines would also generate traffic, dust, waste, biodiversity impacts, and potentially disturb acid sulphate soils. However, the Department considers that these impacts are temporary and can be adequately managed through the mitigation/management measures proposed by Jemena and the conditions of consent.

The proposed modification would not impact known Aboriginal cultural heritage or historic heritage sites. Previously unidentified Aboriginal cultural heritage sites and historic heritage sites may be encountered during construction of the pipeline. However, the Department considers that the unexpected finds protocol and other existing conditions of consent are adequate to manage any risks to such sites.

Construction of the pipelines may also expose land contamination, however the Department considers that the existing conditions are adequate to manage these risks.

The proposed modification would facilitate streamlined management of the construction and operation of pipelines connecting the Port Kembla Gas Terminal with the Eastern Gas Pipeline. The Department considers the proposed modification to be in the public interest and that the benefits of the proposed pipelines outweigh its impacts. Accordingly, the Department consider the modification should be approved, subject to the recommended conditions.

## 7 Determination

It is recommended that the Acting Director, Resource Assessments, as delegate of the Minister for Planning:

- considers the findings and recommendations of this report
- determines that the application SSI 9973 MOD 2 falls within the scope of section 5.25 of the EP&A Act
- forms the opinion under section 7.17(2)(c) of the *Biodiversity Conservation Act 2016* that a BDAR is not required to be submitted as the application would not increase the impact of the project on biodiversity values
- accepts and adopts all of the findings and recommendations in this report as the reasons for making the decision to approve the modification
- modifies the approval SSI 9973
- signs the Notice of Modification (see Appendix B).

hop

#### Recommended by:

4 May 2022

**Allison Sharp** 

Principal Planning Officer Resource Assessments

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

4 May 2022

**Rose-Anne Hawkeswood** 

**Acting Director** 

Resource Assessments

as delegate of the Minister for Planning

# **Appendices**

#### **Appendix A – List of Key Documents**

**A1 – modification report** - Refer to "Modification Application" folder on the Department's planning portal at: MOD 2 - Transfer of Pipeline Segment | Planning Portal - Department of Planning and Environment (nsw.gov.au)

**A2 – Agency Advice** - Refer to "Agency Advice" folder on the Department's planning portal at: <u>MOD</u> 2 - Transfer of Pipeline Segment | Planning Portal - Department of Planning and Environment (nsw.gov.au)

A3 – Additional Information - Refer to "Additional information" folder on the Department's planning portal at: MOD 2 - Transfer of Pipeline Segment | Planning Portal - Department of Planning and Environment (nsw.gov.au)

**Appendix B – Notice of Modification** 

**Appendix C- Consolidated Approval** 

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