

**Appendix A**  
Environmental assessment requirements





NSW GOVERNMENT  
**Department of Planning**

Contact: Swati Sharma  
Phone: (02) 9228 6221  
Fax: (02) 9228 6355  
Email: [swati.sharma@planning.nsw.gov.au](mailto:swati.sharma@planning.nsw.gov.au)

Our ref: 06\_0286

Mr Duncan Hardie  
Chairman  
Hunter Gas Pipeline Pty Ltd  
GPO Box 2557  
Sydney NSW 2001

Dear Mr Hardie

**Proposed Queensland-Hunter Gas Pipeline, Wallumbilla (QLD) to Newcastle (NSW)  
(Application: 06\_0286)**

Reference is made to the request of 13 December 2007 for the preparation of a Concept Plan for the abovementioned proposal and for modified Director-General's requirements. For your information, the Minister of Planning on 11 February 2008 authorised the lodgement of a Concept Plan. The Director-General's environmental assessment requirements for the abovementioned project have been modified, and are attached, pursuant to section 75F(2) of the *Environmental Planning and Assessment Act 1979*. Please note that these requirements supersede and replace the Director-General's requirements previously issued for this project under Division 4, Part 5 of the Act and those subsequently issued on 14 November 2006.

Under section 75F(3) of the Act, the Director-General may alter or supplement these requirements if necessary in light of any additional information that may be provided prior to the proponent seeking approval for the proposal.

Given the scale of the proposed project, the Director-General's requirements have been drafted with a particular focus on a tiered assessment of impacts. With respect to each relevant impact, the Environmental Assessment should present a considered screening of potential impacts along the length of the project, to identify areas of potentially significant impact for further, more detailed assessment. Sufficient information must be provided in the Environmental Assessment to demonstrate the likely impacts and their acceptability. In addition to the assessment of these areas of potentially significant impact, other areas along the length of the project should be assessed in a more general manner, with a particular focus on the development of frameworks for the mitigation, management and monitoring of more minor and generic environmental issues.

The Environmental Assessment should be prepared using valid and accepted technical and scientific tools and methodologies, focussing on key environmental impacts and robust mitigation measures to address potential impacts from the project. You should also ensure that you consult with the Department prior to submission of a draft Environmental Assessment to determine:

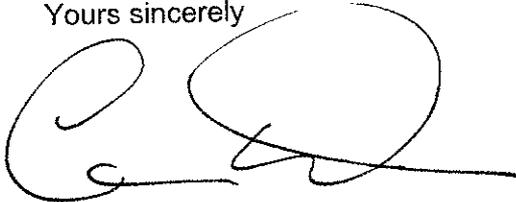
- fees applicable to the application;
- consultation and public exhibition arrangements that will apply; and
- number and format (hard-copy and/or CD-ROM) of the Environmental Assessments that will be required.

Once you have lodged the Environmental Assessment, the Department will consult with the relevant authorities to determine the adequacy of the Environmental Assessment.

Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

You should keep the contact officer for this project, Swati Sharma ((02) 9228 6221 or swati.sharma@planning.nsw.gov.au), up to date with the progress of preparation of the Environmental Assessment, and seek clarification of any issues that may be unclear or may arise during this process.

Yours sincerely



3.9.09

Chris Wilson  
**Executive Director**  
**Major Project Assessments**  
**As delegate for the Director-General**

**WALLUMBILLA TO NEWCASTLE HIGH PRESSURE GAS TRANSMISSION PIPELINE –  
MOREE PLAINS, NARRABRI, GUNNEDAH, LIVERPOOL PLAINS, UPPER HUNTER,  
MUSWELLBROOK, SINGLETON, MAITLAND, PORT STEPHENS AND NEWCASTLE LOCAL  
GOVERNMENT AREAS**

**ENVIRONMENTAL ASSESSMENT REQUIREMENTS UNDER PART 3A OF THE  
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

<b>Project</b>	<p>Concept Plan for the construction and operation of a high pressure natural gas transmission pipeline from the New South Wales – Queensland border near Boomi to Newcastle (for connection to the Queensland component of the pipeline connecting to the Wallumbilla Gas Hub in South Central Queensland), including a short pipeline lateral to the Maitland area. The Queensland Hunter Gas Pipeline would have an initial capacity of approximately 65 petajoules per annum. The project includes:</p> <ul style="list-style-type: none"> <li>• construction and operation of compressor stations, pigging stations, valve stations and connection points (to other pipelines and facilities);</li> <li>• erection of perimeter security fences, security and service lighting and signage;</li> <li>• installation of communication and telemetry towers;</li> <li>• installation of cathodic protection devices;</li> <li>• excavation, drilling and interim spoil storage, replacement, remediation or disposal;</li> <li>• erosion and sedimentation control works;</li> <li>• construction of pipeline corridor access tracks;</li> <li>• rivers and creek crossings;</li> <li>• road and railway crossings;</li> <li>• temporary fencing around work sites and open excavations;</li> <li>• temporary pipe coating plant and associated pipe storage with loading facilities;</li> <li>• clearing of native vegetation;</li> <li>• transportation of pipes and associated equipment by road or rail and temporary storage sites;</li> <li>• establishment and removal of construction camps; and</li> <li>• provision and disposal of water for pipeline hydrostatic testing.</li> </ul>
<b>Site</b>	Land within the following local government areas: Moree Plains, Narrabri, Gunnedah, Liverpool Plains, Upper Hunter, Muswellbrook, Singleton, Maitland, Port Stephens and Newcastle.
<b>Proponent</b>	Hunter Gas Pipeline Pty Ltd
<b>Date of Issue</b>	3 March 2008
<b>Date of Expiration</b>	3 March 2010
<b>General Requirements</b>	<p>The Environmental Assessment must be prepared to a high technical and scientific standard and must include:</p> <ul style="list-style-type: none"> <li>• an executive summary;</li> <li>• a description of the proposal, including construction, operation, and staging;</li> <li>• an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below;</li> <li>• justification for undertaking the project with consideration of the benefits and impacts of the proposal;</li> <li>• a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project; and</li> <li>• certification by the author of the Environment Assessment that the information contained in the Assessment is neither false nor misleading.</li> </ul>
<b>Key Assessment Requirements</b>	<p>The Environmental Assessment must include assessment of the following key issues:</p> <ul style="list-style-type: none"> <li>• <b>Strategic Planning and Project Justification</b> – the Environmental Assessment must provide a strategic assessment of the project, including justification of the need, scale, scope and location for the project, with particular reference to the existing Australian pipeline network, the location of gas reserves and areas of gas demand and expected demand growth. The Environmental Assessment must include an analysis of the required capacity of the project, having regard to existing gas supplies and the potential for additional known reserves to be connected into the project.</li> <li>• <b>Regulatory Interaction</b> – the Environmental Assessment must include details of the</li> </ul>

process, timing and coordination of relevant approvals required in other jurisdictions (including Queensland and Commonwealth approvals), and how these approval processes are proposed to be coordinated with approval processes under New South Wales legislation. In this regard, the Environmental Assessment must include indicative timeframes for relevant approvals, and how these timeframes will relate to construction and operation of the project.

The Environmental Assessment must also specifically consider and assess the impacts of the project, if any, on matters of National Environmental Significance under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

- **Ecological Impacts** – the Environmental Assessment must include a justified and tiered assessment approach for impacts of the project on native vegetation, threatened species, populations, ecological communities and their habitats for each bioregion (including both terrestrial and aquatic ecology). The Environmental Assessment must:
  - include a review of the length of the project to identify bioregions that will be or may be impacted by the project;
  - for each identified bioregion, include a screening of species, populations, ecological communities and habitats based on ecological significance and the potential for impact as a consequence of the project;
  - for species, populations, ecological communities and habitats with high ecological significance and significant potential for impact, include sufficient information to demonstrate the likely impacts, consistent with *Guidelines for Threatened Species Assessment* (DEC & DPI, July 2005)
  - for other species, populations, ecological communities and habitats, a general bioregion-based assessment of ecological impacts associated with the project;
  - consider region-based ecological outcomes, including habitat connectivity and distribution of species, and how these may be impacted by the project;
  - demonstrate a design philosophy of impact avoidance on ecological values, and in particular, ecological values of high significance;
  - include an outline of any proposed compensatory habitat or off-set strategy, including scale, scope and timing of implementation;
  - include a framework for the further consideration of ecological impacts at the project approval stage, and during detailed design of the project, and mitigation of impacts during construction and operation.
- **Heritage Impacts** – the Environmental Assessment must include sufficient information to demonstrate the likely impacts on Aboriginal heritage values/items and outline proposed mitigation measures in accordance with the Draft *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC, 2005). The Environmental Assessment must demonstrate effective consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and selecting options and mitigation measures.
- **Human Amenity Impacts** – the Environmental Assessment must include a justified and tiered assessment approach for impacts on human amenity, including noise and vibration, air quality (dust and odour) and traffic impacts during construction and operation of the project. The Environmental Assessment must:
  - include a review of the length of the project to identify human receptors that will be or may be impacted by the project;
  - characterise potentially impacted human receptors in terms of receptor type (eg isolated receptors, receptor areas (such as residential zones) and sensitive receptors (such as schools, hospitals etc)) and the potential for amenity impacts through noise and vibration, air quality (dust and odour) and traffic generation;
  - identify those receptors and receptor types likely to be significantly impacted by the project in terms of noise and vibration, air quality (dust and odour) and traffic generation, and include sufficient information of impacts on those receptors and receptor types;
  - include a framework for the mitigation, management and monitoring of noise impacts during construction of the project, particularly with respect to receptors and receptor types likely to be significantly impacted by the project and with specific reference to noise- and vibration-intensive construction works/ activities (drilling, blasting, bulk excavation, heavy vehicle movements etc);
  - include a framework for the mitigation, management and monitoring of air quality impacts during construction of the project, particularly with respect to receptors and receptor types likely to be significantly impacted by the project and with specific reference to excavation works in and around receptors and major centres;

- include a framework for the mitigation, management and monitoring of heavy vehicle movements during construction of the project, particularly with respect to impacts in and around major centres, and with respect to large/ long loads and peak vehicle movement generation (for example, haulage of spoil or other materials).
- **Socio-Economic Implications** – the Environmental Assessment must assess the potential for the project to influence the socio-economic profile of major centres and regions along the project route, including demographic change, increased development demand, increased need for social infrastructure and services, economic and employment influences and the potential for connection of other gas resources to the project. The Environmental Assessment, where relevant, must also reflect a design philosophy to support the potential for domestic, commercial and industrial connection to gas supplies in major centres where feasible and appropriate in future.
- **Land Use Planning Impacts** – the Environmental Assessment must assess the potential for the project to generate land use conflicts, particularly with respect to mineral reserves, conservation areas, land of high agricultural value and areas of significant scenic or visual value;
- **Hazards and Risk Impacts** – the Environmental Assessment must include an assessment of the hazards and risk impacts of the project, prepared generally consistent with the approach outlined in *Hazardous Industry Planning Advisory Paper No. 6* (DoP, 1992) and *Multi-level Risk Assessment* (DUAP, 1997), and with specific reference to applicable Australian Standards (including AS2885 Pipelines - Gas and Liquid Petroleum – Operation and Maintenance). The Environmental Assessment shall specifically consider on-going maintenance and safety management of the project, including potential impacts on and from bushfires.
- **Surface and Groundwater Impacts** – the Environmental Assessment must include a justified and tiered assessment approach for impacts on surface water and groundwater. The Environmental Assessment must:
  - include a review of the length of the project to identify major surface water bodies and watercourses (for example, third order streams or higher) that will be or may be impacted by the project;
  - include assessment of the impacts on identified major water bodies and watercourses, with details of how those major water bodies or watercourses would be traversed (where relevant), and how water quality and hydrology would be protected during construction and operation of the project;
  - make specific reference to how erosion and sedimentation would be managed and riparian vegetation would be protected, where relevant, during construction and operation of the protection;
  - include a general assessment of impacts of the project on minor water bodies and watercourses, with provision of a framework for the environmental management of construction works in and around minor water bodies and watercourses;
  - include a framework for the management of groundwater, with specific reference to quality and hydrology, should any aspect of the construction or operation of the project require intersection with or indirect impacts on groundwater;
  - reflect a design philosophy of avoidance of significant water resources, including wetland areas, drinking water sources and catchments and major aquifers.
- **Infrastructure Impacts** - the Environmental Assessment must include a justified and tiered assessment approach for impacts on infrastructure, including roads, rail, electricity, gas and water supply infrastructure. The Environmental Assessment must:
  - include a review of the length of the project to identify major infrastructure that will be or may be impacted by the project, with specific reference to major roads (freeways, highways, state roads etc), high voltage electricity transmission lines, major water supply pipelines and high pressure gas supply infrastructure;
  - include an assessment of the impacts of the project on identified major infrastructure, with specific reference to how the infrastructure would be traversed (where relevant) and an outline of the options for mitigating and managing conflicts between the project and the infrastructure (for example, access arrangements, induction issues etc). Include a framework for the management of impacts at the project approval stage, associated with the construction and operation of the project in and around other infrastructure (for example, in and around domestic water and electricity supplies in populated areas).
- **General Environmental Risk Analysis** – notwithstanding the above key assessment requirements, the Environmental Assessment must include an environmental risk analysis to identify potential environmental impacts associated with the project

	(construction and operation), an outline of the proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, a framework for the consideration of the additional key environmental impact(s) must be included in the Environmental Assessment.
<b>Consultation Requirements</b>	<p>You must undertake an appropriate and justified level of consultation with the following parties during the preparation of the Environmental Assessment:</p> <ul style="list-style-type: none"> <li>• Commonwealth Department of Environment and Heritage;</li> <li>• NSW Department of Environment and Climate Change;</li> <li>• NSW Department of Primary Industries;</li> <li>• Relevant Catchment Management Authorities;</li> <li>• NSW Department of Water and Energy, Country Energy and Transgrid;</li> <li>• NSW Roads and Traffic Authority and Australian Rail Track Corporation;</li> <li>• NSW Department of Lands, relevant Landcare Groups and relevant Rural Lands Protection Boards;</li> <li>• NSW Mine Subsidence Board;</li> <li>• relevant local aboriginal communities and Local Aboriginal Land Councils;</li> <li>• local councils of Moree Plains, Narrabri, Gunnedah, Liverpool Plains, Upper Hunter, Muswellbrook, Singleton, Maitland, Port Stephens and Newcastle.</li> </ul> <p>In addition, appropriate consultation with the local community should be undertaken. The Environmental Assessment must clearly indicate issues raised by stakeholders during consultation, and how those matters have been addressed in the Environmental Assessment.</p>
<b>The Commonwealth Environment Protection and Biodiversity Conservation Act 1999</b>	<p>If your proposal includes any actions that could have significant impact on matters of National Environmental Significance, it will require an additional approval under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Department of the Environment, Water, Heritage and the Arts to determine if an approval under EPBC Act is required for your proposal (6274 1111 or <a href="http://www.environment.gov.au">http://www.environment.gov.au</a>).</p> <p>Please note that the Commonwealth Government has accredited the NSW environmental assessment process for assessing impacts on matters of National Environmental Significance. As a result, if it is determined that an approval is required under the EPBC Act, please contact the Department immediately.</p>
<b>Deemed refusal period</b>	Under clause 8E(2) of the <i>Environmental Planning and Assessment Regulation 2000</i> , the applicable deemed refusal period is 60 days from the end of the Proponent's environmental assessment period for the project.

## Director-General's requirements and cross reference to environmental assessment

Requirements	Section where addressed in Environmental Assessment
<b>General requirements – The Environmental Assessment must include:</b>	
An executive summary.	Executive Summary.
A description of the proposal, including construction, operation, and staging.	Chapter 5.
An assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below.	Part B – Chapters 8 to 17.
Justification for undertaking the project with consideration of the benefits and impacts of the proposal.	<ul style="list-style-type: none"> <li>• Chapter 2.</li> <li>• Chapter 20.</li> </ul>
A draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project.	Chapter 19.
Certification by the author of the Environment Assessment that the information contained in the Assessment is neither false nor misleading.	Before the Executive Summary.
<b>Key assessment requirements</b>	
<b>Strategic planning and project justification</b>	
The Environmental Assessment must provide a strategic assessment of the project, including justification of the need, scale, scope and location for the project, with particular reference to the existing Australian pipeline network, the location of gas reserves and areas of gas demand and expected demand growth	<ul style="list-style-type: none"> <li>• Chapter 2.</li> <li>• Chapter 20.</li> </ul>
The Environmental Assessment must include an analysis of the required capacity of the project, having regard to existing gas supplies and the potential for additional known reserves to be connected into the project.	<ul style="list-style-type: none"> <li>• Section 2.3.</li> <li>• Section 2.4.</li> <li>• Section 2.7.</li> </ul>
<b>Regulatory interaction</b>	
The Environmental Assessment must include details of the process, timing and coordination of relevant approvals required in other jurisdictions (including Queensland and Commonwealth approvals), and how these approval processes are proposed to be coordinated with approval processes under New South Wales legislation. In this regard, the Environmental Assessment must include indicative timeframes for relevant approvals, and how these timeframes will relate to construction and operation of the project.	<ul style="list-style-type: none"> <li>• Chapter 7.</li> </ul>
The Environmental Assessment must also specifically consider and assess the impacts of the project, if any, on matters of National Environmental Significance under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> .	<ul style="list-style-type: none"> <li>• Section 7.3.</li> <li>• Chapter 9.</li> <li>• Chapter 15.</li> </ul>

Requirements	Section where addressed in Environmental Assessment
<b>Ecological Impacts</b>	
The Environmental Assessment must include a justified and tiered assessment approach for impacts of the project on native vegetation, threatened species, populations, ecological communities and their habitats for each bioregion (including both terrestrial and aquatic ecology).	<ul style="list-style-type: none"> <li>• Chapter 9.</li> <li>• Appendix D.</li> </ul>
Include a review of the length of the project to identify bioregions that will be or may be impacted by the project.	<ul style="list-style-type: none"> <li>• Chapter 9.</li> <li>• Appendix D.</li> </ul>
For each identified bioregion, include a screening of species, populations, ecological communities and habitats based on ecological significance and the potential for impact as a consequence of the project.	<ul style="list-style-type: none"> <li>• Chapter 9.</li> <li>• Appendix D.</li> </ul>
For species, populations, ecological communities and habitats with high ecological significance and significant potential for impact, include sufficient information to demonstrate the likely impacts, consistent with <i>Guidelines for Threatened Species Assessment</i> (DEC & DPI, July 2005).	<ul style="list-style-type: none"> <li>• Chapter 9.</li> <li>• Appendix D.</li> </ul>
For other species, populations, ecological communities and habitats, a general bioregion-based assessment of ecological impacts associated with the project.	Chapter 9.
Consider region-based ecological outcomes, including habitat connectivity and distribution of species, and how these may be impacted by the project.	<ul style="list-style-type: none"> <li>• Chapter 9.</li> <li>• Appendix D.</li> </ul>
Demonstrate a design philosophy of impact avoidance on ecological values, and in particular, ecological values of high significance.	<ul style="list-style-type: none"> <li>• Chapter 3.</li> <li>• Chapter 9.</li> <li>• Chapter 18.</li> </ul>
Include an outline of any proposed compensatory habitat or off-set strategy, including scale, scope and timing of implementation.	<ul style="list-style-type: none"> <li>• Chapter 9.</li> <li>• Chapter 18.</li> <li>• Chapter 19.</li> </ul>
Include a framework for the further consideration of ecological impacts at the project approval stage, and during detailed design of the project, and mitigation of impacts during construction and operation.	<ul style="list-style-type: none"> <li>• Chapter 9.</li> <li>• Chapter 18.</li> <li>• Chapter 19.</li> </ul>
<b>Heritage impacts</b>	
The Environmental Assessment must include sufficient information to demonstrate the likely impacts on Aboriginal heritage values/items and outline proposed mitigation measures in accordance with the Draft <i>Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation</i> (DEC, 2005).	<ul style="list-style-type: none"> <li>• Section 10.1.</li> </ul>
The Environmental Assessment must demonstrate effective consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and selecting options and mitigation measures.	<ul style="list-style-type: none"> <li>• Chapter 6.</li> <li>• Section 10.1.</li> <li>• Appendix E.</li> </ul>

Requirements	Section where addressed in Environmental Assessment
<b>Human amenity impacts</b>	
The Environmental Assessment must include a justified and tiered assessment approach for impacts on human amenity, including noise and vibration, air quality (dust and odour) and traffic impacts during construction and operation of the project	Chapter 11.
Include a review of the length of the project to identify human receptors that will be or may be impacted by the project;	Section 11.2.
Characterise potentially impacted human receptors in terms of receptor type (eg isolated receptors, receptor areas (such as residential zones) and sensitive receptors (such as schools, hospitals etc)) and the potential for amenity impacts through noise and vibration, air quality (dust and odour) and traffic generation;	Section 11.2.
Identify those receptors and receptor types likely to be significantly impacted by the project in terms of noise and vibration, air quality (dust and odour) and traffic generation, and include sufficient information of impacts on those receptors and receptor types;	<ul style="list-style-type: none"> <li>• Section 11.3.</li> <li>• Appendix F.</li> <li>• Section 11.4</li> <li>• Appendix H.</li> <li>• Section 11.5</li> <li>• Appendix I</li> <li>• Section 11.6</li> </ul>
Include a framework for the mitigation, management and monitoring of noise impacts during construction of the project, particularly with respect to receptors and receptor types likely to be significantly impacted by the project and with specific reference to noise- and vibration-intensive construction works/ activities (drilling, blasting, bulk excavation, heavy vehicle movements etc)	<ul style="list-style-type: none"> <li>• Section 11.3.</li> <li>• Section 11.6</li> <li>• Appendix G.</li> </ul>
Include a framework for the mitigation, management and monitoring of air quality impacts during construction of the project, particularly with respect to receptors and receptor types likely to be significantly impacted by the project and with specific reference to excavation works in and around receptors and major centres	<ul style="list-style-type: none"> <li>• Section 11.4.</li> <li>• Section 11.6.</li> <li>• Appendix H.</li> </ul>
Include a framework for the mitigation, management and monitoring of heavy vehicle movements during construction of the project, particularly with respect to impacts in and around major centres, and with respect to large/ long loads and peak vehicle movement generation (for example, haulage of spoil or other materials)	<ul style="list-style-type: none"> <li>• Section 11.5.</li> <li>• Section 11.6.</li> <li>• Appendix I.</li> </ul>
<b>Socio-economic implications</b>	
The Environmental Assessment must assess the potential for the project to influence the socio-economic profile of major centres and regions along the project route, including demographic change, increased development demand, increased need for social infrastructure and services, economic and employment influences and the potential for connection of other gas resources to the project.	<ul style="list-style-type: none"> <li>• Chapter 12.</li> <li>• Section 2.3.</li> <li>• Section 2.4.</li> </ul>

Requirements	Section where addressed in Environmental Assessment
The Environmental Assessment, where relevant, must also reflect a design philosophy to support the potential for domestic, commercial and industrial connection to gas supplies in major centres where feasible and appropriate in future.	<ul style="list-style-type: none"> <li>• Section 5.1.</li> <li>• Section 2.3.</li> </ul>
<b>Land use planning impacts</b>	
The Environmental Assessment must assess the potential for the project to generate land use conflicts, particularly with respect to mineral reserves, conservation areas, land of high agricultural value and areas of significant scenic or visual value.	Chapter 13.
<b>Hazards and risk impacts</b>	
The Environmental Assessment must include an assessment of the hazards and risk impacts of the project, prepared generally consistent with the approach outlined in <i>Hazardous Industry Planning Advisory Paper No. 6</i> (DoP, 1992) and <i>Multi-level Risk Assessment</i> (DUAP, 1997), and with specific reference to applicable Australian Standards (including AS2885 Pipelines - Gas and Liquid Petroleum – Operation and Maintenance).	<ul style="list-style-type: none"> <li>• Chapter 14.</li> <li>• Appendix J.</li> </ul>
The Environmental Assessment shall specifically consider on-going maintenance and safety management of the project, including potential impacts on and from bushfires.	<ul style="list-style-type: none"> <li>• Chapter 14.</li> <li>• Appendix J.</li> </ul>
<b>Surface and groundwater impacts</b>	
Include a justified and tiered assessment approach for impacts on surface water and groundwater.	Chapter 15.
Include a review of the length of the project to identify major surface water bodies and watercourses (for example, third order streams or higher) that will be or may be impacted by the project.	<ul style="list-style-type: none"> <li>• Chapter 15.</li> <li>• Appendix K.</li> </ul>
Include assessment of the impacts on identified major water bodies and watercourses, with details of how those major water bodies or watercourses would be traversed (where relevant), and how water quality and hydrology would be protected during construction and operation of the project.	<ul style="list-style-type: none"> <li>• Chapter 15.</li> <li>• Appendix K.</li> </ul>
Make specific reference to how erosion and sedimentation would be managed and riparian vegetation would be protected, where relevant, during construction and operation of the project.	Chapter 15.
Include a general assessment of impacts of the project on minor water bodies and watercourses, with provision of a framework for the environmental management of construction works in and around minor water bodies and watercourses.	Chapter 15.
Include a framework for the management of groundwater, with specific reference to quality and hydrology, should any aspect of the construction or operation of the project require intersection with or indirect impacts on groundwater.	Chapter 15.
Reflect a design philosophy of avoidance of significant water resources, including wetland areas, drinking water sources and catchments and major aquifers.	<ul style="list-style-type: none"> <li>• Chapter 3.</li> <li>• Chapter 15.</li> <li>• Chapter 18.</li> </ul>

Requirements	Section where addressed in Environmental Assessment
<b>Infrastructure impacts</b>	
Include a justified and tiered assessment approach for impacts on infrastructure, including roads, rail, electricity, gas and water supply infrastructure.	Chapter 16.
Include a review of the length of the project to identify major infrastructure that will be or may be impacted by the project, with specific reference to major roads (freeways, highways, state roads etc), high voltage electricity transmission lines, major water supply pipelines and high pressure gas supply infrastructure.	<ul style="list-style-type: none"> <li>• Chapter 16.</li> <li>• Chapter 18.</li> </ul>
Include an assessment of the impacts of the project on identified major infrastructure, with specific reference to how the infrastructure would be traversed (where relevant) and an outline of the options for mitigating and managing conflicts between the project and the infrastructure (for example, access arrangements, induction issues etc).	<ul style="list-style-type: none"> <li>• Section 5.3.</li> <li>• Chapter 16.</li> <li>• Chapter 6.</li> <li>• Appendix C.</li> <li>• Chapter 18.</li> </ul>
Include a framework for the management of impacts at the project approval stage, associated with the construction and operation of the project in and around other infrastructure (for example, in and around domestic water and electricity supplies in populated areas).	<ul style="list-style-type: none"> <li>• Chapter 16.</li> <li>• Chapter 18.</li> </ul>
<b>General environmental risk analysis</b>	
Include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), an outline of the proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures.	<ul style="list-style-type: none"> <li>• Chapter 8.</li> <li>• Table 8.4.</li> <li>• Chapter 18.</li> </ul>
Where additional key environmental impacts are identified through this environmental risk analysis, a framework for the consideration of the additional key environmental impact(s) must be included in the Environmental Assessment.	<ul style="list-style-type: none"> <li>• Chapter 10.2 (Non-indigenous heritage).</li> <li>• Section 17.1 (waste).</li> <li>• Section 17.2 (contaminated lands).</li> <li>• Appendix L.</li> <li>• Section 17.3 (geology and soils).</li> <li>• Section 17.4 (visual amenity).</li> <li>• Section 17.5 (greenhouse gas emissions).</li> </ul>
<b>Consultation requirements</b>	
<p>Undertake an appropriate and justified level of consultation with the following parties during the preparation of the Environmental Assessment:</p> <ul style="list-style-type: none"> <li>• Commonwealth Department of Environment and Heritage.</li> <li>• NSW Department of Environment and Climate Change.</li> <li>• NSW Department of Primary Industries.</li> <li>• Relevant Catchment Management Authorities.</li> <li>• NSW Department of Water and Energy, Country Energy and Transgrid.</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 6.</li> <li>• Appendix C.</li> </ul>

Requirements	Section where addressed in Environmental Assessment
<ul style="list-style-type: none"> <li>• NSW Roads and Traffic Authority, State Rail Corporation and Australian Rail Track Corporation.</li> <li>• NSW Department of Lands, relevant Landcare Groups and relevant Rural Lands Protection Boards.</li> <li>• NSW Mine Subsidence Board.</li> <li>• Relevant local aboriginal communities and Local Aboriginal Land Councils.</li> <li>• Local councils of Moree Plains, Narrabri, Gunnedah, Liverpool Plains, Upper Hunter, Muswellbrook, Singleton, Maitland, Port Stephens and Newcastle.</li> </ul>	
<p>In addition, appropriate consultation with local community should be undertaken. The Environmental Assessment must clearly indicate issues raised by stakeholders during consultation, and how those matters have been addressed in the Environmental Assessment.</p>	<p>Appendix C.</p>

<b>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</b>	
<p>If the proposal includes any actions that could have significant impact on matters of National Environmental Significance requiring an additional approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), this approval is in addition to any approvals required under NSW legislation. The proponent is responsible for contacting the Department of Environment, Water, Heritage and the Arts to determine if an approval under EBPC Act is required.</p>	<ul style="list-style-type: none"> <li>• Section 7.3.</li> <li>• Chapter 6.</li> <li>• Appendix C.</li> </ul>