



# Eastern Star Gas

# Coolah to Newcastle Gas Pipeline

# **Preliminary Environmental Assessment**

9<sup>™</sup> November 2010

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# **Table of Contents**

Table	of Cor	ntents	2
	List of	figures	3
	List of	tables	3
	Acron	yms	4
Execu	itive su	mmary	5
1.	Introd	luction	7
	1.1	Overview of Preliminary Pipeline Corridor	7
	1.2	The Proponent	7
	1.3	Scope	8
	1.4	Objectives	8
2.	Strate	gic Planning and Justification	
	2.1	Need for the project	10
	2.2	Strategic justification	10
	2.3	Preferred Preliminary Pipeline Route selection	10
3.	Prope	osed Activity Description	11
	3.1	Pipeline design	11
	3.2	Pipeline Infrastructure	11
	3.3	Other Requirements	11
	3.4	Construction Specifics	12
	3.5	Construction	13
	3.5.1	Pipeline Construction Activities	13
	3.5.2	Other Associated Activities	13
	3.5.3	Typical Equipment	13
	3.6	Commissioning Activities	14
	3.6.1	Operating conditions and practices	14
	3.6.2	Maintenance of pipeline	15
	3.6.3	Maintenance of corridor	15
4.	Plann	ing and approvals process	
	4.1	Background	16
	4.2	Commonwealth Legislative Controls	16
	4.3	NSW State Legislative Controls	17
	4.3.1	Other NSW Environmental Planning Instruments	21
5.	Comr	munity and Stakeholder Engagement	23
	5.1	Methodology	23
	5.2	Identifying stakeholders	23
	5.3	Key issues for stakeholders	23
6.	Prelim	ninary Environmental Assessment	
	6.1	Planning Methodology	25
	6.2	Risk Assessment	25





6.3	Key Environmental Issues	25
6.3.1	Critical Crossings	25
6.3.2	Cultural Heritage	26
6.3.3	Flora and fauna	27
6.3.4	Noise	27
6.3.5	Traffic Management	28
6.4	Mining Tenements and Subsidence	28
6.5	Other Environmental Issues	29
6.5.1	Air Quality	29
6.5.2	Land Use	29
6.5.3	Soil Profile, Erosion and Sediment Control	29
6.5.4	Waste Management	30
6.5.5	Water Quality and Drainage Management	30
6.5.6	Vibration	30
6.5.7	Visual Amenity	30
Append	lix A: Overview map of the Narrabri to Wellington and Coolah to Newcastle	
	pipelines	31
Append	lix B: Overview mapping of the preliminary Coolah to Newcastle pipeline	
	corridor	32
Append	Jix C: Coolah to Newcastle Stakeholder Contact Register	34

# List of figures

Figure 1:	Current overview map of the preliminary Coolah to Newcastle pipeline corridor6
Figure 2:	Current overview map of the preliminary Coolah to Newcastle pipeline corridor9
List of table	es
Table 1:	Summary of construction elements
Table 2:	Applicable Commonwealth Legislation
Table 3:	NSW legislation
Table 4:	Summary of the current Critical Crossings proposed by the pipeline alignment26





# Acronyms

AEMO	Australian Energy Market Operator
AS	Australian Standard
CEMP	Construction Environmental Management Plan
CSG	Coal Seam Gas
DECCW	Department of Environment, Climate Change and Water (State)
DEWHA	Department of Environment, Water, Heritage and the Arts (Federal)
DGRs	Director-General's Requirements
DoP	NSW Department of Planning
EP&A Act	Environmental Planning and Approval Act, 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act, 1999
EPI	Environmental Planning Instrument
ESG	Eastern Star Gas
FEED	Front End Engineering and Design
HDD	Horizontal Directional Drilling
LNG	Liquefied Natural Gas
NSW	New South Wales
PEA	Preliminary Environmental Assessment
PIG	Pipeline Inspection Gauge
MNES	Matter of National Environmental Significance
MOU	Memorandum of Understanding
NCSGP	Narrabri Coal Seam Gas Project
NSW	New South Wales
SCADA	Supervisory Control And Data Acquisition
SEPP	State Environmental Planning Policies
ТВС	To Be Confirmed





# **Executive summary**

## Introduction

Eastern Star Gas proposes to supply natural gas via a high pressure gas pipeline from Coolah via the Bayswater Power Station and Hexham to its proposed Liquefied Natural Gas (LNG) facility on Kooragang Island, New South Wales. Gas from the Narrabri Coal Seam Gas Project (NCSGP) will be supplied from Eastern Star Gas's planned Narrabri to Wellington gas pipeline (MP10\_0146) through Coolah where it is proposed that the Coolah to Newcastle pipeline would tie in and transport gas to the LNG facility. The opportunity also exists to supply natural gas to Bayswater Power Station via a short lateral and also into the domestic market via a small lateral to Hexham.

# Need for the project

Eastern Star Gas entered into a Memorandum Of Understanding (MOU) with Hitachi and Toyo Engineering in May 2010 outlining an in principle agreement to further investigate the supply of Coal Seam Gas to a proposed LNG plant and export facility on Kooragang Island at Newcastle. Part of the investigation outlined under the MOU involves the construction of a new pipeline from Coolah to the Kooragang Island site. This project provides Eastern Star Gas with the infrastructure it requires to deliver its gas reserves to market.

The pipeline will also provide security of supply to the Newcastle and Sydney Markets. AEMO has determined that demand in these markets may exceed Supply from 2013 and Sydney customers have already suffered supply interruptions.

A number of parties are evaluating gas fired power generation in the Newcastle/Hunter region. The pipeline would be capable of supplying these proposed future projects.

## **Project Objectives**

The Coolah to Newcastle Gas Pipeline seeks to provide an environmentally acceptable, cost effective alignment to supply the proposed LNG facility with high pressure gas from Coolah taking into account the principles of avoidance and minimisation of social, cultural and environmental factors.

# **Project Description**

Gas sourced from the NCSGP would be supplied to the Coolah take off point through the proposed Narrabri to Wellington pipeline (see **Figure 1**). The pipeline will be a high pressure gas pipeline, at least 460mm in diameter and approximately 270km long. Pipe lengths will be supplied to the alignment by truck and welded together on site before being buried in accordance with Australian Standard 2885, taking into account engineering design, localised topography and land use. The construction right of way area will be up to 40m wide with additional requirements for lay down and access at regular intervals along the alignment.





# Planning Context

Eastern Star Gas is submitting this Preliminary Environmental Assessment for its proposal to construct and operate a high pressure natural gas pipeline and ancillary infrastructure from Coolah in central northern NSW to the proposed LNG facility on Kooragang Island, Newcastle, NSW (see **Figure 2**).

In accordance with Section 75F of the New South Wales Environmental Planning and Assessment Act 1979, Eastern Star Gas seeks the New South Wales Department of Planning Director General's Requirements (DGRs) for the proposed development.

ESG is targeting completion of the Part 3A planning process by the second quarter, 2011.

Figure 1. Overview of Eastern Star Gas's proposed pipeline construction network from Narrabri to Wellington and Coolah to Newcastle. For a larger version of this map, please see Appendix A.







# 1. Introduction

This Preliminary Environmental Assessment (PEA) report has been prepared by CNC Project Management on behalf of Eastern Star Gas Limited (ESG) in its capacity as Operator of the Narrabri Coal Seam Gas Project (NCSGP). The Project is owned by a Joint Venture (JV) between ESG (65% project interest and operator) and Santos Limited (35% project interest). The proposal comprises plans to supply natural gas through a high pressure pipeline from Coolah to Newcastle in New South Wales (NSW). This pipeline will be approximately 280km in length and tie into the proposed Narrabri to Wellington pipeline adjacent to Coolah which would link the NCSGP to the Kooragang Island facility (see **Figure 2**). The project also proposes a compressor station to be located between Merriwa and Bayswater Power Station and two small laterals. One of the laterals would tie in to the Bayswater power station whilst the second lateral would tie in to the meter station at Hexham.

The JV holds the rights to Coal Seam Gas (CSG) produced from Petroleum Exploration Licence (PEL) 238, Petroleum Assessment Lease (PAL) 2 and Petroleum Production Licence (PPL) 3. Together, PEL 238, PAL 2 and PPL 3 form the basis of the NCSGP Project, which the NJV is seeking to commercialise and develop. The proposed LNG export facility compliments the proposal to supply natural gas to the Wellington Gas Fired Power Station through the Narrabri to Wellington pipeline (MP\_10\_0146).

# 1.1 Overview of Preliminary Pipeline Corridor

The preliminary pipeline corridor extends to 250m either side of the notional centreline (see **Figure 2**). It commences on the outskirts of Coolah and travels South East over rolling hills passing Cassilis to the South, paralleling the Golden Highway until it turns South East in the vicinity of Merriwa.

From there, the preliminary alignment avoids the Goulburn River National Park to the east before paralleling the former Merriwa to Sandy Hollow railway line and passing North of Denman. The preliminary corridor then enters the upper Hunter Valley, and crosses the Hunter River for the first time approximately 1.5km east of Denman on its way to Lake Liddell in the vicinity of Bayswater Power Station. The corridor then cuts through south of Lake Liddell and travels through the areas of Dyrring, Mitchells Flat, Elderslie, Stanhope, Hillsborough, Gosforth and Maitland Vale before passing Largs and Morpeth, Woodberry, Tarro and Hexham and entering on to Kooragang Island, North of Newcastle, terminating south of Teal Street at the proposed LNG facility site.

There are numerous creek and river corridors that require to be crossed by the pipeline, including the lower Hunter River. Native vegetation is largely confined to areas that do not lend themselves readily to agriculture; namely river corridors, hill crests, outcrops and low lying areas with poor drainage. The corridor also transects a number of minor roads and proposes seven highway crossings and five railway line crossings.

## 1.2 The Proponent

ESG listed on the Australian Stock Exchange in February 2001. Shortly after listing, ESG acquired 100% ownership of Petroleum Exploration Licence 238 (PEL 238), a 9,100km<sup>2</sup> licence area covering the highly prospective coal-bearing Bohena Trough area of the Permo-Triassic Gunnedah Basin. Since 2004, ESG has been the operator of the NCSGP which has focused on the exploration and development of the prospective CSG reservoirs of the Gunnedah Basin.





## 1.3 Scope

This PEA has been prepared to provide information to the Department of Planning to accompany the Project Application.

# 1.4 Objectives

The objectives of this project are to:

- Deliver natural gas to the port of Newcastle to supply NSW's first liquefied natural gas export facility.
- Deliver natural gas to Hexham which would allow the opportunity to tie into the existing NSW gas grid and improve security of supply for the Newcastle and Sydney region.
- Deliver natural gas to Newcastle/ Hunter industrial and power generation customers including provision for the supply of gas to the Bayswater Power Station.
- Adopt principles of avoidance and minimisation in project alignment selection to limit the impact of the project on the surrounding environment, cultural heritage and land use.





**Figure 2**: Current overview map of the proposed Coolah to Newcastle pipeline corridor. Please refer to Appendix B for a larger version of this map and a more detailed alignment from Singleton to Newcastle.



Data Forest

Overview Map Coolah to Newcastle Preliminary Pipeline Corridor

EBGCN Revision C 29/10/2010





# 2. Strategic Planning and Justification

# 2.1 Need for the project

ESG entered into a Memorandum of Understanding (MOU) with Hitachi and Toyo Engineering to conduct a technical and financial feasibility study for the construction of a one million tonne per annum LNG plant on Kooragang Island, NSW that would have the potential to expand to four million tonnes. To satisfy the supply of gas into the new LNG facility, a new pipeline is necessary to transport the gas from the NCSGP between Coolah and Newcastle.

# 2.2 Strategic justification

The proposed pipeline alignment has been based around three key objectives:

- the delivery of natural gas to the proposed LNG export facility on Kooragang Island.
- the delivery of natural gas into the Sydney- Newcastle pipeline at Hexham; and
- the delivery of natural gas to the Newcastle/Hunter industrial and power generation customers including potentially the Bayswater Power Station that would provide the opportunity to incorporate gas fired power into the control and operation of the coal fired power generation;

# 2.3 Preferred Preliminary Pipeline Route selection

The preliminary route selection has been based on the following principals:

- To avoid areas of environmental sensitivity and significance;
- To avoid sites of cultural sensitivity and significance;
- To avoid an alignment that would lead to any substantial community or landowner concerns;
- To encourage the principal of sharing common infrastructure corridors with existing infrastructure;
- To minimise road, rail and watercourse crossings.

Following initial analysis of these principals, the preliminary pipeline alignment (see Figure 2) shows the best representation of these factors and will be further refined following detailed investigation of the alignment constraints and additional, more detailed consultation with landowners, the community and other stakeholders.





# 3. Proposed Activity Description

# 3.1 Pipeline design

Australian Standard 2885 will guide the design, construction and operation of the proposed pipeline.

# 3.2 Pipeline Infrastructure

Above ground facilities for the pipeline may include:

- Temporary and permanent access to site.
- Scraper station(s) and main line valve(s), which would be used for control and access to the pipeline for cleaning and inspection and for shutting down supply in an emergency.
- A compressor station.
- Meter station(s) at the Bayswater and Hexham facilities.
- Cathodic protection anode beds.
- Pipeline marker signs (required by AS 2885).

The exact number and location of these items has not been determined at this stage and would form part of the detailed pipeline design.

# 3.3 Other Requirements

- A temporary construction camp to accommodate the workforce during construction and commissioning activities is proposed.
- Water will be required for hydro-testing the pipeline and dust suppression during construction.
- Transportation of material to site i.e. pipe, plant and equipment will likely occur through the use of road transport. An investigation into transport options will be undertaken as part of the project risk assessment.





# 3.4 Construction Specifics

Table 1 provides a summary of the construction elements for the pipeline.

# Table 1: Summary of construction elements

Construction Element	Details
Diameter of Pipeline	At least 460mm diameter. TBC following FEED.
Width of Construction Right of Way	Up to 40m
Depth of trench to provide the minimum depth of cover required under AS2885	Dependant on terrain, land use and existing infrastructure. These will all be analysed during the risk assessment to ascertain where along the alignment the depth of cover may be varied in accordance with AS 2885.
Construction workforce	Approx 150 Construction personnel
Construction configuration	TBC following appointment of Principle Contractor.
Standard construction hours	06:00 – 18:00 hours 7 days / week.
Standard work cycle	TBC following appointment of Principle Contractor.
Construction duration	TBC
Normal time between clear and grade and reinstatement	TBC





#### 3.5 Construction

Construction will involve utilisation of various construction techniques, including horizontal directional drilling, thrust boring, rock blasting and above ground facility installation. Detailed construction schedule, including number of crews, timing and restoration of the alignment will be developed following selection of preferred contractor for the works.

## 3.5.1 Pipeline Construction Activities

A number of activities are undertaken in the construction of a pipeline:

- Detailed survey and fencing.
- Set up of temporary facilities.
- Clear and grade of the row.
- Pipe stringing.
- Pipe welding and inspection.
- Trenching/ blasting/ boring rigs.
- Pipe laying (lowering in and laying).
- Bedding.
- Backfilling and compaction.
- Restoration and rehabilitation of topsoil.

## 3.5.2 Other Associated Activities

Other activities associated with pipeline construction include:

- Landholder negotiations.
- Property acquisition.
- Property and access arrangements.
- Use of utilities such as natural gas (to purge the pipeline after it is constructed) and electricity.
- Traffic management.
- Plant, equipment and heavy haulage.

#### 3.5.3 Typical Equipment

Typical equipment used during pipeline construction includes:

- Bull dozers.
- Loaders.
- Graders.
- Sidebooms.
- Trucks.





- Padding machines.
- Excavators.
- Bucket Wheel Trenchers.
- HDD Rigs.
- Welding units.
- Crew vehicles.

# 3.6 Commissioning Activities

The commissioning activities would typically include:

- Hydrostatic testing.
- Water disposal.
- Final reinstatement.
- Installation of cathodic protection systems.
- Ensuring line of sight with sign installation.

Hand over commissioning to operations encompassing five key activities:

- Instrumentation calibration.
- Performance testing.
- Baseline intelligent PIG run.
- Pipeline drying.
- Purging and loading.

# 3.6.1 Operating conditions and practices

General pipeline operations encompass routine, periodic operation and maintenance programs that can typically include ground and aerial patrols, repair of equipment, cleaning of the pipeline (pigging), monitoring for corrosion and remediation and ongoing maintenance including along the right of way or access roads.

Aerial and/or ground inspections include detection of erosion, monitoring of reinstatement success and detection and control of weed species.

The pipeline will have a cathodic protection system, which will be periodically monitored and maintained.

All gas flows are monitored with high accuracy metering and supervisory control and data acquisition systems (SCADA). This information will be continually checked against the volume of gas within the pipeline and any major imbalance immediately checked to confirm the pipe integrity.





# 3.6.2 Maintenance of pipeline

Corrosion is prevented by the protective external coating and cathodic protection system. The cathodic protection system is monitored regularly to ensure that the protection voltages are within limits and to monitor any likely areas of corrosion activity. The cathodic protection system and external coating system work inter-dependently to protect the pipeline from corrosion. If potential for corrosion is detected the relevant section of pipe may need to be excavated and remediation measures implemented.

A maintenance schedule would be created for the orderly undertaking of valve lubrication and maintenance, sign and sign post maintenance, painting of above ground facilities and other needed activities.

Intelligent pig runs might be conducted from time to time during the life of the pipeline. The results of such runs would be used to determine if, and where, any remedial action is required.

## 3.6.3 Maintenance of corridor

Maintenance of the pipeline corridor will be carried out through a process of regular inspections and repairs.

Routine inspection of the pipeline corridor would typically target:

- Maintenance of line of sight.
- Erosion.
- Noxious weed infestations.
- Encroachment.
- Unsafe activities being undertaken on the easement.





# 4. Planning and approvals process

This section outlines the statutory context within which the ESG Coolah to Newcastle Gas Pipeline is proposed. It identifies the potentially applicable legislation, nominates relevant statutory instruments and provides preliminary information regarding the application.

# 4.1 Background

Planning in New South Wales is carried out under the statutory control of the *Environmental Planning and Assessment Act 1979.* The New South Wales Department of Planning (DoP) is responsible for the administration of this Act.

On the 5<sup>th</sup> July 2010, ESG held an initial discussion with the DoP regarding the proposed Coolah to Newcastle Gas Pipeline project. As the LNG project has developed, there have been informal subsequent discussions prior to the submission of this PEA.

ESG has made initial contact regarding the project with all Local Government Authorities in whose area the project is proposed to be located, describing the intent of the project and is maintaining contact as the project planning continues (Key Stakeholders are listed in Appendix B).

# 4.2 Commonwealth Legislative Controls

# Environmental Protection and Biodiversity Conservation Act, 1999

A search of the Environmental Protection and Biodiversity Conservation (EPBC) Protected Matters database indicates that the proposed pipeline is located in proximity to one World Heritage Property, one National Heritage Place, three Wetlands of International Significance, five Threatened Ecological Communities, ninety one threatened species and sixty nine migratory species.

With appropriate avoidance and minimisation measures to be applied, it is not anticipated that the construction of the pipeline and its ancillary infrastructure would constitute a Controlled Action. A detailed on ground survey of flora and fauna will be undertaken as part of the Environmental Assessment process to ensure that all Maters of National Environmental Significance (MNES) are avoided by the alignment.

Should a MNES be significantly affected by the proposal, an alternative alignment would be considered where possible or a referral would be prepared and submitted for assessment by the Department of Environment, Water, Heritage and the Arts (DEWHA).

Legislation	Requirements
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Protects Aboriginal and Torres Strait Islander heritage. The route has been selected so as to avoid any recorded sites of cultural heritage significance. Other unrecorded sites or items in the locality will be identified through consultation with the local Aboriginal community and other stakeholders during the final route survey and construction phase.

 Table 2:
 Applicable Commonwealth Legislation





Legislation	Requirements
Australian Heritage Council Act 2003	Protects non-Indigenous heritage. The route has been selected so as to avoid any recorded sites of Non-Indigenous heritage. Other unrecorded sites or items in the locality, if present, will be identified through consultation with the local community and other stakeholders during the final route survey and construction phase.
Environmental Protection and Biodiversity Conservation Act 1999	Protects matters of national environmental significance. There are no known impacts by the proposal on matters of national environmental significance. Further detailed ecological assessment of potential impacts on flora, fauna and ecological communities will be undertaken by flora and fauna specialists. Reports would outline avoidance of any MNES or minimisation strategy should there be any significant impact on MNES.
Native Title Act 1993	Enables native title claims over relevant lands. The proposed alignment will enter into Native title claimant areas and will therefore be subject to negotiation with relevant claimant groups regarding applicable areas where the pipeline proposes to cross public land.

# 4.3 NSW State Legislative Controls

Table 3 discusses the requirements of the most applicable pieces of NSW legislation in the context of the proposal.

Table 3:	NSW legislation
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Legislation	Requirements
Pipelines Act 1967 Pipelines Regulation, 2005	ESG proposes to make an application for a licence to construct and operate a pipeline under this Act.
Occupational Health and Safety Act 2000 Occupational Health and Safety Regulation, 2005	Promotes and regulates the health, safety and welfare of workers. OH&S will be incorporated into project planning and the construction phase. Construction safety is also factored into risk assessment and alignment selection.
Environmental Planning and Assessment Act, 1979.	Outlines the planning and approvals process required to gain a Pipeline licence. Part 3A application is being prepared for this proposal.
Threatened Species	Conserves threatened species, populations and ecological





Legislation	Requirements	
Conservation Act 1995 Threatened Species Conservation Regulation, 2002	communities (and their habitats) of animals and plants. It is unlikely that threatened species, populations or communities will be impacted upon by the proposal. Additional assessment will be made during site ecological survey.	
Heritage Act 1977	Excavation permits under Section 140 in relation to relics.	
Heritage Regulation, 2005	Not required for approved Part 3A projects pursuant to section 75U of the EP&A Act.	
National Parks and Wildlife Act 1974	Permits and consents under Section 87 and 90 in relation to disturbance of Aboriginal objects.	
National Parks and Wildlife Regulation, 2009	Not required for approved Part 3A projects pursuant to section 75U of the EP&A Act.	
Native Vegetation Act, 2003	Permits and approvals to remove Native Vegetation. Not required for	
Native Vegetation Regulation, 2005	approved Part 3A projects pursuant to section 75U of the EP&A Act.	
Noxious Weeds Act 1993 Noxious Weeds Regulation, 2008	Low likelihood of spread or need for control of noxious weeds, no relevant control notices. Planning and construction documentation will be prepared to ensure that the provisions outlined in this Act are complied with.	
Contaminated Land	Notification is required of contaminated land that presents "a	
Contaminated Land Management Regulation, 2005		
Pesticides Act 1999	Controls and regulates the use of pesticides. Pesticide use, if required,	
Pesticides Regulation, 2009	will be in accordance with regulations during construction and operations.	
Protection of the Environment Operations Act 1997 and associated Regulations.	Regulates and licenses pollution. Licenses will be sought prior to construction if required	





Legislation	Requirements
Roads Act 1993	Outlines the requirements for approval for the carrying out of works in, on or over a public road.
Roads Regulation, 2008	Consent would be required from the Roads and Traffic Authority prior to undertaking works. Consent to cross roads can't be refused if works are being undertaken under a Part 3A approval.
Rivers and Foreshores	Permit in relation to excavation on protected land.
Improvement Act 1948	Not required for Part 3A projects pursuant to section 75U of the EP&A Act.
Coastal Protection Act, 1979	Ministerial consent required to carry out development within the coastal zone.
	Not required for Part 3A projects pursuant to section 75U of the EP&A Act.
Rural Fires and Environmental Assessment Legislation Amendment Act 2000	The site is not mapped as bushfire prone land. Fire risk will be addressed in preparing the CEMP during construction and the operating EMP during the operating phase.
Rural Fires Regulation, 2008	
Soil Conservation Act 1938	Provides for the conservation of soil resources and farm water resources and for the mitigation of erosion. Erosion and sedimentation control will be incorporated into construction works.
Waste Avoidance and Resource Recovery Act 2001	Promotes waste avoidance and resource recovery. Waste will be managed in accordance with the NSW Waste Avoidance and Resource Recovery Strategy 2007.
Water Management Act 2000 and associated Regulations.	Certain exemptions for Part 3A projects pursuant to section 75U of the EP&A Act.
Water Act 1912 and associated Regulations.	Licence under Section 10, or a permit under Section 18F of the Water Act may be required for water extraction where the Water Management Act does not apply.





#### **Environmental Planning and Assessment Act 1979**

Clause 75B of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) identifies projects to which Part 3A applies as:

(1) General This Part applies to the carrying out of development that is declared under this section to be a project to which this Part applies:

(a) by a State Environmental Planning Policy...

#### State Environmental Planning Policy (Major Projects) 2005

Clause 6 and Schedule 1 of the State Environmental Planning Policy (Major Projects) 2005 identifies developments to which Part 3A of the EP&A Act applies.

Clause 6 provides:

Development that, in the opinion of the Minister, is development of a kind:

(a) that is described in Schedule 1 or 2...

Schedule 1 Item 26A Pipelines provides:

Development for the purposes of a pipeline in respect of which:

- a) a licence is required under the Pipelines Act 1967, or
- b) an application for a licence is made under that Act or
- c) after the commencement of this clause, or a licence was granted under that Act before the commencement of this clause.

ESG proposes to make an application for a licence under the *Pipelines Act 1967*.

If the Minister for Planning is satisfied the proposal is within the scope of the assessment framework referred to above, it becomes a project to which Part 3A applies. The recent discussions with the DoP indicate that assessment under Part 3A is appropriate.

#### State Environmental Planning Policy (Infrastructure) 2007

Pipelines are permissible without consent, pursuant to Regulation 53 of the State Environmental Planning Policy (Infrastructure) 2007. Regulation 53 provides:

(1) Development for the purpose of a gas pipeline may be carried out by any person without consent on any land if the pipeline is subject to a licence under the Pipelines Act 1967 or a licence or authorisation under the Gas Supply Act 1996.

ESG proposes to make an application for a Pipeline Licence under the *Pipelines Act, 1967.* The proposed pipeline corridor avoids impact on any land or land use zones subject to administration under the National Parks and Wildlife Act, 1974.





Provided that all criteria are met and a Pipeline Licence is issued, it would be permissible to undertake construction of the pipeline across all land, subject to any conditions prepared by the Minister.

#### Preliminary Environmental Assessment

ESG is submitting this PEA for its proposal to construct a natural gas pipeline from Coolah in central northern NSW to its proposed LNG facility on Kooragang Island, with a compressor station between and two laterals. These laterals are proposed to tie into the Bayswater power station and to the Hexham meter station.

In submitting this PEA ESG seeks the DoP Director-General's Requirements (DGRs) for the proposed development in accordance with Section 75F of the EP&A Act.

#### 4.3.1 Other NSW Environmental Planning Instruments

The relevance of environmental planning instruments to the Part 3A assessment and approval process is dictated by 75O (3) of the EP&A Act.

#### Section 75O(3) states:

In deciding whether or not to give approval for the concept plan for a project, the Minister may (but is not required to) take into account the provisions of any environmental planning instrument that would not (because of section 75R) apply to the project if approved. However, the regulations may preclude approval for a concept plan for the carrying out of a class of project (other than a critical infrastructure project) that such an instrument would otherwise prohibit.

In recognition of the Minister's discretion to consider the provisions of environmental planning instruments (EPIs), a preliminary review has been undertaken to identify those which may be potentially relevant. They are listed below.

#### State Environmental Planning Polices (SEPP)

- State Environmental Planning Policy No. 14 Coastal Wetlands
- State Environmental Planning Policy No. 33 Hazardous and Offensive Development
- State Environmental Planning Policy No. 44 Koala Habitat Protection
- State Environmental Planning Policy No. 55 Remediation of Land
- State Environmental Planning Policy (Major Projects) 2005
- State Environmental Planning Policy (Rural Lands) 2008
- State Environmental Planning Policy (Infrastructure) 2007

#### **Regional and Local Environmental Planning**

The proposed alignment transects the following Local Government Authorities (LGAs) in sequential order from Coolah:

• Warrumbungle



- Upper Hunter
- Muswellbrook
- Singleton
- Maitland
- Port Stephens
- Newcastle

#### **Regional Environmental Plans**

The following REP would require to be taken into consideration:

• Hunter REP 1989- Heritage

#### Local Environmental Plans

The following LEPs would require to be taken into consideration

- Coolah Local Environmental Plan 2000
- Maitland Local Environmental Plan, 1993
- Merriwa Local Environmental Plan, 1992
- Muswellbrook Local Environmental Plan, 2009
- Newcastle Local Environmental Plan, 2003
- Port Stephens Local Environmental Plan, 2000
- Singleton Local Environmental Plan, 1996



PROJECT MANAGEMENT



# 5. Community and Stakeholder Engagement

# 5.1 Methodology

The methodology developed by ESG has at its core a process that will build a high level of confidence within the local community that will encourage acceptability of the proposed pipeline route amongst directly affected landholders and key project stakeholders.

The proposed process involves:

- Meeting face to face with all of the potentially affected landholders, including provision of general project information.
- Engage directly with key project stakeholders to understand fully their views and opinions in relation to the project and the potential impacts it may have in relation to their area(s) of interest (see appendix C for key project stakeholder list).
- Holding community information sessions to provide further detail about the proposed pipeline and its impact on local communities.
- From the feedback obtained from the direct contact with landholders, key project stakeholder meetings and through public meetings, refine the alignment. During the development of the Environmental Assessment, any new landholders are to be contacted and their input sought as will existing owners where alignment changes are proposed.
- Make a determination as to the final proposed pipeline route based on landholder and stakeholder input.

Based on the methodology ESG has a high level of confidence that the proposed pipeline route will be acceptable to the majority of directly affected landholders and the wider community. A detailed Community Engagement Plan will be developed as part of the Environmental Assessment to outline methodology and planning in greater detail.

## 5.2 Identifying stakeholders

There are currently approximately 275 directly affected private landholders on the alignment. These include coal mining and other proprietary limited companies in the upper Hunter and greater Newcastle areas. Input into route alignment selection by those directly affected landholders is key to ensuring that an alignment is selected which minimises impacts to property, proposed future developments and general farming and mining operations.

Input from key project stakeholder groups is also a critical step in the process of alignment selection. Stakeholders shall be kept informed of project timelines and provided with accurate project information in a timely manner.

# 5.3 Key issues for stakeholders

There are a number of issues for stakeholders surrounding this proposed project. These include:

• Uncertainty or lack of information in relation to construction activity and how a pipeline running through a property is going to impact on directly affected landholders.





- Cumulative effect of development in the region. The pipeline represents more infrastructure being proposed in an area that is already being actively explored for coal, CSG and other mineral reserves. The area around Newcastle is also experiencing expansion of road, rail and power networks and urban sprawl.
- Alignment selection being undertaken to respect, avoid and minimise impact on land that holds agricultural, environmental and cultural significance in the region.
- Opportunities for employment and engagement of local companies, local people and indigenous workforce during construction and ongoing maintenance and management of the pipeline and its facilities.

PROJECT MANAGEMENT



# 6. Preliminary Environmental Assessment

# 6.1 Planning Methodology

The steps involved in preparing the Environmental Assessment Report include:

- 1. Preliminary constraints assessment and mapping to determine the preliminary preferred alignment.
- 2. Route inspection to assess the route in terms of specific site constraints or issues.
- 3. Consultation with relevant Government agencies, landowners and other stakeholders to refine the alignment and obtain further planning information and site specific detail.
- 4. Identification of key issues by undertaking a qualitative risk assessment of all identified issues. Key issues will be those that present a high or extreme risk.
- 5. Review of existing studies pertaining to the route and the key environmental issues and extrapolation of findings if possible.
- 6. Undertake detailed flora, fauna, cultural heritage and any other specialist reports required to ensure adequate mitigation of all high risk factors.
- 7. Compile Environmental Assessment and prepare report in accordance with the DGRs.
- 8. Lodge the Environmental Assessment Report for adequacy assessment.

# 6.2 Risk Assessment

A risk assessment of the alignment and required construction activities will be undertaken and included as part of the Environmental Assessment. This process will be in accordance with AS 2885 and SEPP No 33 - Hazardous and Offensive Development. It will outline the projects high risk activities in relation to their consequence and likelihood and will also suggest appropriate mitigation measures to be employed during planning, construction and commissioning of the pipeline.

The pipeline's proposed impacts on each key environmental issue will be analysed as part of this risk assessment process.

# 6.3 Key Environmental Issues

The key environmental Issues that must be considered during the alignment selection and construction of the pipeline are summarised in sections 6.3.1 to 6.3.5. Section 6.4 describes the consideration that must be given to mining operations and subsidence zones whilst section 6.5 describes other environmental issues that must be considered.

# 6.3.1 Critical Crossings

Critical crossings can be described for the purposes of this PEA as being any crossing of existing infrastructure or a waterway that might involve an additional approval, permit or alteration of construction technique. Table 4 provides a summary of the critical crossings, however this is list subject to change as more information is gathered during the Environmental Assessment process and the alignment is refined.





Crossing Type	No. <sup>1</sup>	Comments
Sealed Rd Crossings	65	Includes four crossings of the Golden Hwy, four crossings of the New England Hwy and one crossing of the Pacific Hwy.
Unsealed Rd Crossings	36	Does not include access to private residences or other tracks.
Railway Crossings	9	Comprises 6 live railway line crossings and 3 unused railway corridors.
Watercourse crossings	78	Includes any instance where pipeline crosses a distinct clearly defined waterway. Does not include minor drainage lines or irrigation channels.
Major Watercourse crossings	9	Where pipeline alignment crosses a River or large creek.

## 6.3.2 Cultural Heritage

It is not anticipated that the alignment will impact on any known item of Aboriginal or European Heritage. A Cultural Heritage Assessment Report will be produced for the alignment following a desktop review and ground survey to confirm that there are adequate avoidance measures in place to avoid existing sites and to identify and mitigate any impacts on new sites discovered during survey.

Searches of the NSW Aboriginal Heritage Information Management System and the Australian Heritage Council's Register of the National Estate will assist with the desktop assessment, as will a review of the associated documentation of previous studies conducted on, or in the vicinity of, the pipeline corridor. Field survey work will be undertaken by a suitably qualified archaeologist and will be supported by representatives from relevant local Aboriginal Land Councils and Stakeholders. Any new sites discovered during the field work will be registered with the State. Mitigation strategies engaged in relation to these sites will follow best management principles and additional input from relevant stakeholders. The Cultural Heritage Assessment Report will be the core reference document used to identify registered site locations and outline Cultural Heritage Management procedures and protocols required during construction. This document will form part of the Environmental Assessment.

<sup>&</sup>lt;sup>1</sup> Approximate number of crossings (subject to confirmation).





# 6.3.3 Flora and fauna

Alignment selection has been made with the principles of avoidance and minimisation of impacts to vegetated areas at the forefront of consideration. The majority of the pipeline alignment traverses previously disturbed land of lower ecological value. There are a number of locations where vegetation of various qualities will be impacted by the pipeline corridor. These are concentrated around:

- Kp 84.5-93 construction adjacent to the Goulburn River National Park. Construction will be through predominantly cleared agricultural land but will involve removal of some native vegetation outside of the National Park boundary.
- Kp 264 Pipeline corridor traverses close to the boundary of Hexham swamp, part of the Hunter Wetlands National Park.
- Kp 267 Entry on to Kooragang Island in the vicinity of the Hunter Wetlands National Park, a listed Ramsar site of international importance. Construction is proposed to be outside of the National Park boundary but might involve the removal of native vegetation in proximity to it.
- Road reserves with good quality vegetation. Potential exists to minimise impact by selecting crossing points which have degraded vegetative values or the potential for HDD also exists.
- Creek crossings and low lying areas with good quality riparian zones. Potential exists to minimise impact by selecting crossing points which have degraded vegetative values or the potential for HDD also exists.

The flora and fauna component of the Environmental Assessment will take into account previous survey data from similar studies prepared for other projects in the vicinity of the pipeline corridor. The NSW Department of Environment, Climate Change and Water (DECCW) threatened species and ecological community databases will also be utilised to ensure that any known locations of rare and threatened species/communities are avoided by all project related impacts.

Field based ecological survey will provide more detailed information on the location of higher ecological values and information on isolated populations of threatened flora and fauna allowing for further modification to the alignment and an assessment of project offsets. It is expected that this strategy will ensure that ecological values throughout the project can be avoided or at least minimised to an acceptable level.

# 6.3.4 Noise

Construction of the pipeline will be undertaken through some heavily populated localities. There are expected to be minimal and short duration impacts on the surrounding area through noise nuisance. Project planning and construction will be undertaken in accordance with AS2436-1981, Guide to Noise Control on Construction, Maintenance and Demolition Sites and the Interim Construction Noise Guidelines (DECCW, 2009).

During the construction phase of the pipeline, construction machinery will be subject to noise restrictions and directed to work within specified hours to minimise disruption to surrounding residences. It is too early to determine whether there will be any rock blasting activity, its frequency or location. Any blasting activity will be undertaken in accordance with Australian Standards.





The planned compressor station will be subject to additional noise controls, as a permanent facility capable of emitting noise under normal operating conditions. The facility will be positioned an adequate distance away from residences to ensure noise management levels can be achieved at all times. A noise impact assessment will be prepared as part of the Environmental Assessment in accordance with all relevant guidelines and standards and will specify means by which the project can be undertaken and operated without a measurable deterioration in the amenity of the localised environment.

## 6.3.5 Traffic Management

The majority of materials are likely to be delivered to site by road transport resulting in an increased number of traffic movements across the project site during the construction phase. The Hunter Valley region is already subject to a large volume of heavy traffic movement in relation to the coal mining operations, agriculture and general servicing of larger regional populations of towns such as Muswellbrook, Singleton and Maitland. A traffic impact assessment and management plan will be undertaken as part of the Project Risk Assessment in accordance with the relevant guidelines and in consultation with Local and State Authorities (where applicable)

It is anticipated that the pipeline workforce will predominantly use 4wd vehicles to access site for work during construction. It has yet to be determined where the workforce will be accommodated but as this would have a direct influence over traffic impacts; this too will be considered during the Project Risk Assessment.

There are numerous existing farm roads that will provide good access to the proposed alignment. It is proposed to utilise existing roads wherever possible for access to and for delivery of materials to the construction Right of Way. It is possible that some locations will require new access for entry to the construction Right of Way and for the delivery of pipe and other materials. The need for temporary lay-down areas, turning areas and material stockpile sites along the alignment where the construction right of way will be identified during the Environmental Assessment

# 6.4 Mining Tenements and Subsidence

The proposed alignment corridor traverses three mine subsidence zones as well as numerous mining tenements. The Hunter Valley region has been and will continue to be an important resource for the mining industry. The proposed pipeline corridor will avoid and minimise the risk associated with current mine subsidence and future mining activity and actively engage with coal mine owners, tenement holders and the mine subsidence board to ensure that the risk of impacting subsidence areas and areas of future mining activity is avoided or mitigated as far as possible.





#### 6.5 Other Environmental Issues

The following environmental issues will also be discussed in the Environmental Assessment. It is not anticipated that the following issues will constitute a high risk of adverse impacts although the associated risks will be characterised to ensure compliance with all relevant local, State and Commonwealth regulations and guidelines.

#### 6.5.1 Air Quality

There will be limited impact on air quality during the construction and operation of the proposed pipeline. These impacts will be localised to the vicinity of works and may include construction machinery and vehicle emissions and fugitive dust generation along the Construction Right of Way from excavation activities, loading of bedding material or from vehicle movements. It is not anticipated that a detailed air quality assessment will be required as part of the Environmental Assessment. However, potential impacts will be managed at a local level under the Construction Environmental Management Plan (CEMP).

#### 6.5.2 Land Use

The area between Coolah and Newcastle is predominantly arable rural lands supporting a wide range of agricultural operations, agri-businesses, tourism, mining and viticulture.

The area around the Hunter Valley is dominated by coal mining which continues to supply the Bayswater and Liddell Power Stations as well as a busy export market from the Port of Newcastle. In addition to the previous and existing mine areas, there are also a number of tenements over undisturbed areas marked for future expansion and development.

A small percentage of land in the area is reserved for State Forests and the preservation of flora and fauna in nature reserves, State Conservation Areas, Community Conservation Areas and National Parks.

The area is also criss-crossed by linear features including road, rail, creek and river corridors and their associated travelling stock routes and reserves. The pipeline alignment is proposed to pass several towns experiencing expansion and urban sprawl into rural areas.

It is proposed that by applying the project route alignment selection principles, impacts on competing land use activities in the area will be minimised.

## 6.5.3 Soil Profile, Erosion and Sediment Control

Soil surveying and profiling will be examined in the Environmental Assessment with any areas of Acid Sulphate Soil, rock or highly dispersive soils that are at risk from construction being identified and avoided as far as is reasonably practical. Once there is a higher level of understanding as to where these areas are and the level of impact that the pipeline corridor will have on the locations, a more detailed description of the alignment will be prepared outlining management procedures and methodology that will be applied to the project. Site specific mitigation measures will be prepared as part of the CEMP to manage construction through each particular area.





# 6.5.4 Waste Management

Waste materials that are likely to be generated by construction of the pipeline will be identified in the Environmental Assessment and a waste management philosophy will be outlined. A specific waste management plan and register will be generated as part of the CEMP with regular site inspections being undertaken to ensure that adequate waste management practices are being undertaken. Any hazardous materials used in construction of the pipeline will have their own procedure outlining their use and disposal.

# 6.5.5 Water Quality and Drainage Management

Alignment selection is critical to maintaining water quality during construction. By avoiding and minimising steep gradients where possible, the opportunity for run-off from the easement can be minimised. Identifying constraints in this regard will allow for adequate erosion and sedimentation management plans to be prepared and implemented under the project CEMP.

Maintaining water quality through creek and river crossings and when in the vicinity of drainage lines and watercourses will also be a high priority. Timing of construction and construction technique will be critical in ensuring positive outcomes and maintenance of water quality within prescribed guidelines. Restoration and suitable rehabilitation methodology will also be outlined in the Environmental Assessment and actioned in the CEMP.

## 6.5.6 Vibration

The risk assessment process will analyse this as part of the constructability review. Any potential for damage through vibration associated with construction techniques such as rock blasting, rock hammering or trenching will be listed in the Environmental Assessment and mitigated accordingly.

## 6.5.7 Visual Amenity

The pipeline infrastructure will be buried which will limit the majority of visual impact to the temporary construction phase of the project. The pipeline alignment travels through lands extensively modified for cropping, grazing and infrastructure. AS2885 requires that line of sight is maintained with pipeline markers placed at regular intervals along the rehabilitated easement, on fence lines, where road crossings, railways or watercourses and other locations considered necessary to achieve compliance with the standard. The impact of the proposed pipeline on visual amenity will be investigated as part of the Environmental Assessment.

Page **31** of **46** 





Appendix A: Overview map of the Narrabri to Wellington and Coolah to Newcastle pipelines.



Page 32 of 46





Appendix B: Overview mapping of the preliminary Coolah to Newcastle pipeline corridor



Page **33** of **46** 





# Singleton to Newcastle Alignment



Page **34** of **46** 





# Appendix C: Coolah to Newcastle Stakeholder Contact Register.

	Stakeholder	Role	Contact Person	Department/Title
Federal				
	Dept of Environment, Water, Heritage & the Arts	Statutory Authority	Peter Barnett	First Assistant Secretary Approvals & Wildlife Division
State Regulators				
	Department of Planning NSW	Statutory Authority	David Kitto	Environmental Planning Officer, Infrastructure Projects
	Department of Planning NSW - Hunter Region	Statutory Authority	Michael Leavey	Regional Director of Planning
	Department of Environment, Climate Change and Water - NSW National Parks and Wild Life Service	Statutory Authority		Coastal Branch
	Department of Environment, Climate Change and Water - NSW National Parks and Wild Life Service	Statutory Authority		Central Coast Hunter Range
	Department of Environment, Climate Change and Water - NSW National Parks and Wild Life Service	Statutory Authority		Port Stephens Marine Park
	Department of Environment, Climate Change and Water NSW - Aboriginal Heritage	Statutory Authority	Phil Purcell	Culture and Heritage Division - North West Operations
	Department of Environment, Climate Change and Water NSW - Aboriginal Heritage	Statutory Authority	Sarah Paddington	Culture and Heritage Division - Hunter and Mid North Coast Operations

Page **35** of **46** 





	Department of Environment, Climate Change and Water NSW - Aboriginal Heritage	Statutory Authority	Glen Morris	Culture and Heritage Division - Hunter and Mid North Coast Operations
	Department of Environment, Climate Change and Water - National Parks and Wild Life Service	Statutory Authority	Mark Peacock	Director Weston Sector
	Department of Environment, Climate Change and Water - National Parks and Wild Life Service	Statutory Authority	Wayne Dornbusch	Regional Manager
	Department of Environment, Climate Change and Water - Office of Water	Statutory Authority	David Harriss	Deputy Director General and Commissioner
	Department of Industry and Investment - Minerals & Energy - Pipeline licence	Statutory Authority	Ms Karen Smith	Executive Director
	Department of Industry and Investment - Minerals & Energy - Pipeline licence	Statutory Authority	Mr Peter Lansdown	Manager Supply & Networks Performance Minerals & Energy Division
	Department of Industry and Investment - Coal and Petroleum Titles	Statutory Authority	Mr Jeff Ingram	Coal & Petroleum Titles
	Department of Industry and Investment - Primary Industry -Forestry Section	Statutory Authority		Forests NSW - North East Coffs Harbour
Other State Agencies				
	Livestock Health and Pest Authority	Statutory Authority	Darren Paull - General Manager	Central North District Office - Tamworth
	Livestock Health and Pest Authority	Statutory Authority	Andrew Mulligan - Snr Ranger	Central North District - Mudgee Office
	Livestock Health and Pest Authority	Statutory Authority	Greg Wood - General Manager	Cumberland District - Maitland Office
	Livestock Health and Pest Authority	Statutory Authority	Rick Matts - General Manager	Mid - Western District - Singleton Office

Page **36** of **46** 





	Department of Lands - Land and Property Management Authority - Land Titles	Statutory Authority	Madi Maclean	Executive Director of Land Property Produce and Services
	Department of Lands - Land and Property Management Authority - Land Titles	Statutory Authority	Lavie Cusi	Product Manager - IWP data Services
	Department of Lands - Land and Property Management Authority - Crown Land	Statutory Authority	Graham Harding	General Manager
	Department of Lands - Land and Property Management Authority - Crown Land	Statutory Authority	Belinda Kelly	Regional Office
	Mine Subsidence Board	Statutory Authority	Greg Cole-Clark	Head Office
-	National Native Title Tribunal	Statutory Authority	Kashana Cohen-McMeekin	Acting Case Management Assistant/Search Coordinator
-	NTSCorp	Statutory Authority	Peter Schultz	Senior Land Tenure/Notifications Officer
	Office of the Registrar, Aboriginal Land Rights Act 1983 (NSW)	Statutory Authority	Courtney Field	Assistant Research Officer
Local Authority				
	Maitland City Council		Peter Blackmore	Mayor
	Maitland City Council		David Evans	General Manager
	Muswellbrook Shire Council		Martin Rush	Mayor
	Muswellbrook Shire Council		Steve McDonald	General Manager
	Newcastle City Council		John Tate	Lord Mayor
	Newcastle City Council		Lindy Hyam	General Manager

Page **37** of **46** 





	Port Stephens Council		Cr Bruce Mackenzie	Mayor
	Port Stephens Council		Peter Gesling	General Manager
	Singleton Council		Cr Sue Moore	Mayor
	Singleton Council		Scott Greensill	General Manager
	Upper Hunter Shire Council		Cr Lee Watts	Mayor
	Upper Hunter Shire Council		Cr Reosean O"Sullivan	General Manager
	Warrumbungle Shire Council		Peter Shinton	Mayor
	Warrumbungle Shire Council		Robert Geraghty	General Manager
	Warrumbungle Shire Council - Coolah Office			
Other Local Authorities				
	Hunter - Central Rivers Catchment Management Authority		Dr Wej Paradice	CEO & Chairman
	Central West Catchment Authority	Wellington HO	Tim Ferraro	General Manager
	Central West Catchment Authority	Wellington HO	Tom Gavel	Chairman
	Central West Catchment Authority	Wellington HO	Chris Robinson	PA to General Manager
	Central West Catchment Authority	Dubbo Office		
	Central West Catchment Authority	Coonabarabran Office		

Page **38** of **46** 





Other Representative Groups				
	NSW Farmers Association		Judy Sheedy	Chairperson
Elected Representatives				
	Member for Barwon (STATE)	Member NSW Legislative Assembly	The Hon. Kevin Humphries MP,	National Party of Australia
	Member for Upper Hunter (STATE)	Member NSW Legislative Assembly	The Hon. George Souris MP	National Party of Australia
	Member for Maitland (STATE)	Member NSW Legislative Assembly	The Hon. Frank Terenzini	Australian Labour Party
	Member for Wallsend (STATE)	Member for Wallsend	The Hon. Sonia Hornery	Australian Labour Party
	Member for Newcastle (STATE)	Minister for the Hunter & Member for Newcastle	The Hon. Jodi McKay	Australian Labour Party
	Member for Port Stephens (STATE)	Member for Port Stephens	The Hon. Craig Baumann	Liberal Party of Australia
	Member for Cessnock (STATE)	Member for Cessnock	The Hon. Kerry Hickey	Australian Labour Party

Page **39** of **46** 





	Member for Parkes (Federal)	Member for Parkes	The Hon. Mark Coulton	National Party of Australia
	Member for Hunter (Federal)	Member Federal House of Representatives	The Hon. Joel Fitzgibbon	Australian Labour Party
	Member for Paterson (Federal)	Member Federal House of Representatives	The Hon. Bob Baldwin	Liberal Party of Australia
	Member for Newcastle (Federal)	Member Federal House of Representatives	The Hon. Sharon Grierson	Australian Labour Party
Other Elected Representatives				
	Member for Wakehurst (STATE)	Member NSW Legislative Assembly	The Hon. Brad Hazzard Shadow Min. For Industry Shadow Min. For Planning	Liberal Party of Australia
	NSW Shadow Minister for the Hunter	Member NSW Legislative Assembly & Shadow Minister for the Hunter	The Hon. Michael Gallacher	Liberal Party of Australia
	NSW Shadow Minister for Industry	Member NSW Legislative Assembly & Shadow Minister for Industry	The Hon Duncan Gay	Member of the National Party

Page **40** of **46** 





	Minister for Energy	Member NSW Legislative Assembly & Minister for Energy	The Hon Paul Lynch	Member Australian Labour Party
	The Planning Minister	Member NSW Legislative Assembly &	The Hon Tony Kelly	Member Australian Labour Party
	Member for Oxley	Member NSW Legislative Assembly & Shadow Minister for Ports	The Hon. Andrew Stoner, Shadow Minister for State Development Leader of NSW National Party	National Party of Australia
	Member for Inverness (Federal)	Member Federal House of Representatives	The Hon. John Williams	National Party of Australia
Utilities				
	Roads and Traffic Authority;		Richard Munro	Asset Officer
	Australian Rail Track Corporation		Kate Bell	Assistant Property Manager
	Country Energy		Dave Thompson	Sub Transmission Project Engineer
	Transgrid			
	APA Group			
	ERM Power			
	Origin Energy			

Page **41** of **46** 





	Telstra	Case manager to be appointed - occurs when "Dial Before You Dig" is contacted.	
-	Optus	Case manager to be appointed - occurs when "Dial Before You Dig" is contacted.	
	Dial B4 U Dig for other utilities	Dominic Puiu	State Manager
Local Aboriginal Land Councils and Individuals			
	Gilgandra Local Aboriginal Land Council	Sheila Johnson	
	The Gomeroi Traditional Owners Group	Craig Trindall	Chairperson
	Mudgee Local Aboriginal Land Council	Tony Lonsdale	Chief Executive Officer (Acting)
	Wanaruah Local Aboriginal Land Council	Noel Downs	Chief Executive Officer
	Worimi Local Aboriginal Land Council	Andrew Smith	Chief Executive Officer
	Worimi Conservation Lands Board of Management	Steve Larkin	Chairperson
	Red Chief LALC	Robert Horne	Chairperson
	Mindaribba Local Aboriginal Land Council	Ronald Griffiths	Chief Executive Officer
	Awabakal Traditional Owners	Kerrie Brauer	Director / Administration

Page **42** of **46** 





Awabakal Local Aboriginal Land Council	Sheryl Kitchener	Chief Executive Officer
Aboriginal Land Council (Northern Zone)	Leon	Officer
Aboriginal Land Council (Northern Zone) Armidale Office	Charles Lynch Kelvin Allen	Officer
Cacatua Cultural Consultants	Donna Sampson	Admin Manager
Tom & Narelle Miller		
Wonn1 Contracting	Arthur Fletcher	Fieldworker
Mur-roo-ma Inc	Anthony Anderson	Worimi Traditional Custodian
Nur-Run-Gee Pty Ltd	Lennie Anderson OAM	Director
Werris Creek GTNS	Burrell Galigabali	
Caroona GTNS	Susan Smith	
Tracey Skene		
John & Margarate Matthews		
Wonnarua Nation Aboriginal Corp	Laurie Perry	Chairperson / Director
Wonnarua Culture Heritage	Gordon Griffiths	
Tocomwall	Scott Franks	Director

Page **43** of **46** 





	John and Margaret Matthews - Consultants		John and Margaret Matthews	
	Arthur Fletcher, Wonn1 Contracting		Mr Arthur Fletcher	Fieldworker
	Wellington Valley Wiradjuri Aboriginal Corp		Stephen Parkes	Board Member
	Ungooroo Aboriginal Corporate		Ms Taasha Layer	Manager
Media				
	Coolah District Diary	Fortnightly Publication	Coolah	Binnaway, Cassilis, <b>Leadville, Mullaley,</b> Neilrex, <b>Premer</b> , Spring Ridge, <b>Tambar Springs</b> , Uarbry and Weetaliba
	Coonabarabran Times	Weekly Newspaper (Thursday)	Coonabarabran	Coonabarabran, Baradine, Binnaway, Coolah, Dunedoo, Mendooran
	The Mudgee Guardian	Tri-weekly Newspaper	Mudgee	Mudgee, <b>Gulgong,</b> Rylstone, Kandos, <b>Dunedoo,</b> <b>Coolah, Goolma,</b> Capertee, Mount Knowles, Clandulla, Birriwa.
	Koori Mail	Weekly Newspaper (Wednesday)	Indigenous	Indigenous Communities
	The Land	Weekly Newspaper	Rural	Rural landholders
	Newcastle Herald	Daily Newspaper		Newcastle, Taree, Wyong, Gosford, Port Stephens, Raymond Terrace, Tuncurry-Forster, Maitland, Cessnock, The Entrance, Kurri Kurri, Salamander Bay. Nelson Bay

Page **44** of **46** 





Newcastle Star	Weekly Newspaper	Newcastle, Broadmeadow, Lake Macquarie
Newcastle Post	Weekly Newspaper	Broadmeadow, Wickham, Carrington, Mayfield, Shortland, Merrylands, Waratah, Newcastle, Hamilton, Merewether, Jesmond, Wallsend, Lambton, New Lambton, Adamstown, Kotara, Elermore Vale
Maitland Mercury	Daily Newspaper	Maitland, Aberglassyn, Beresfield, Morpeth, Lorn, Kurri-Kurri
Tamworth City News	Weekly Newspaper	Tamworth, Manilla, Barraba, Kootingal, Werris Creek, Quirindi, Duri, Currabubula, Nemingha, Dungowan, Woolomin, Attunga, Carroll, Somerton, Moonbi, Gunnedah, Nundle.)
Singleton Argus	Tues Thurs	Singleton, Branxton, Greta
Scone Advocate	Thursdays	Scone, Aberdeen, Murrundi, Merriwa
Muswellbrook Chronicle	Friday	Muswellbrook, Denman, Aberdeen
 Hunter Valley News		Singleton, Scone, Muswellbrook
Hunter Valley Town & Country Leader	Fortnightly	Maitland, Cessnock, Muswellbrook, Scone, Singleton, Dungog, Gloucester
The Gloucester Advocate		Gloucester, Stroud, Stroud Road, Booral, Krambach, Barrington, Stratford

Page **45** of **46** 





Mining Tenements			
	ABX1 Pty Ltd - ELA3926	Henry Kinstlinger	
	AGL Operations Pty Ltd - PEL267		
	AGL Operations Pty Ltd - PEL4		
	Anglo Coal Pty Ltd - EL5406		
	Bloomfield Collieries Pty Ltd - EL6705	Paul Taylor	
	Dept Industry and Investment - Auth286		
	Eastern Star Gas - PEL433		
	GEO Dynamics - EL5560		
	Glendon Brook Coal Pty Ltd - EL7405	John McGuigan	
	Granite Power Limited - EL7509		
-	Liddell Tenements Pty Ltd - ML1597		
-	Liddell Tenements Pty Ltd - ML1313		
	Macquarie Energy Pty Ltd - EL7505		
	Macquarie Energy Pty Ltd - PEL456		
	Macquarie Energy Pty Ltd -PEL458		
	Nova Coal Australia Pty Ltd - Auth72		

Page **46** of **46** 





Nova Coal Australia Pty Ltd - CML4		
Nova Coal Australia Pty Ltd - ML1428		
Republic Coal Pty Ltd - EL6812		
Spur Hill No 2 Pty LTD - EL7429	Roger Turner	