

Community Update

Newcastle Gas Storage Facility

June 2011

Energy in
action®



For more information:

AGL is committed to helping the community understand the gas storage process and the management measures in place to protect the local environment.

We will provide more information throughout the Gas Storage Facility project.

If you have questions, please contact:

Arianna Henty

Land & Approvals Manager
Phone: 1300 473 660
GSF@agl.com.au
agl.com.au/NewcastleGSF

An environmental assessment has been prepared and is now on public exhibition. This is an update of the key findings of the environmental assessment.

Project Context

Natural gas is an essential energy source for our community and the demand for gas is growing. It is a significant part of the energy mix, and is a greener alternative to traditional coal generated energy.

The Newcastle region is heavily reliant on other states to provide a continuous supply of gas. Ageing infrastructure and pipeline capacity constraints in South Australia, Victoria and Queensland have the potential to impact on supply. There is also a legal requirement that these states restrict supply during their own times of emergency, if required.

AGL Energy Limited (AGL) is proposing to build a gas storage facility in Tomago, near Newcastle. It is proposed to be built within the industrial estate that already includes the Tomago Aluminium Company.

This proposed gas storage facility will serve as a gas reserve during times of peak demand providing greater security of supply to the region. It will have the capacity to store up to two (2) weeks supply of gas protecting the local community, industry and commercial enterprises from losing supply during high demand periods or when supply is restricted.

An Environmental Assessment (EA) for the proposed Newcastle Gas Storage Facility Project has been prepared. The EA will be on public exhibition from 24 June to 29 July 2011. This update provides a summary of the key issues disclosed in the EA.

Project Benefits

There are a number of key project benefits at national, state and local levels. These include:

- > Supporting the NSW State Government initiative to reduce greenhouse gas emission targets.
- > Reducing the state's dependence on imported gas, providing a more secure and continuous supply.
- > Creating flow on economic benefits to the region during the construction, commissioning and operational phases.
- > Providing greater security of gas supply, particularly during peak load periods.
- > Providing infrastructure support for the growing gas supply industry in NSW.

Project description

The Project comprises three main areas:

The Primary Project Area (PPA)

This area comprises of the gas plant site, access road and utility corridor and gas pipeline access corridor.

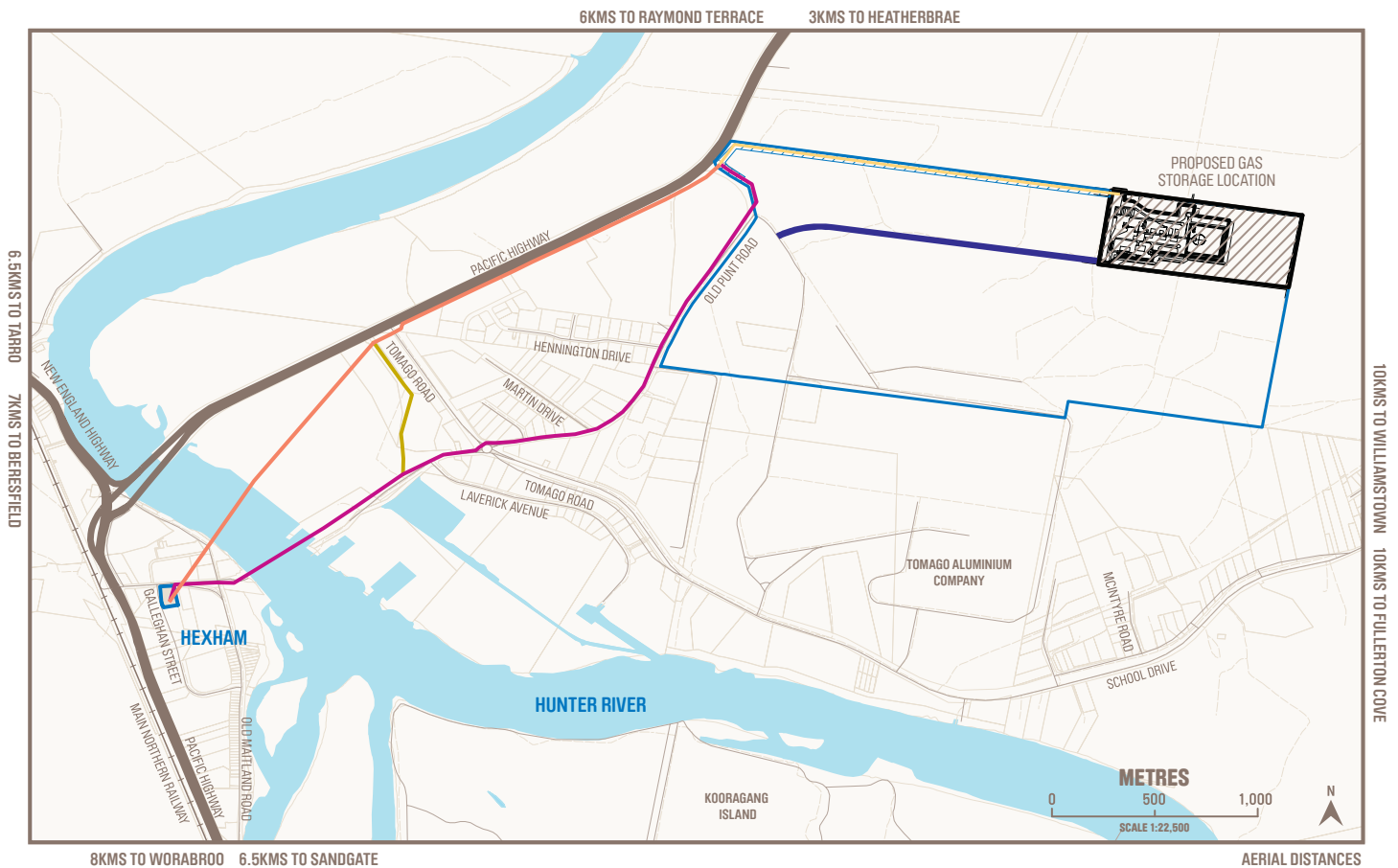
The gas plant will occupy approximately 14 ha of the 28 ha site. The site was previously subjected to heavy mineral sand mining which began in the early 1970s and continued through until the 1990s. Much of this vegetation that will need to be cleared was introduced after the sand mining period. While it was initially thought there may be some residual soil impacts from prior site activities, tests have shown that concentrations of arsenic, nickel and other heavy metals, are all well below regulatory guidelines.

The gas pipeline corridor from Hexham to Tomago.

Two pipeline options have been considered in the EA. The preferred option is planned to go along Old Punt Road then across the industrial parkland to connect with the proposed plant. The second and least preferred option runs adjacent to the Pacific Highway. In both cases the pipeline will start at the Hexham receiving station, go under the Hunter River, and be buried for the entire length until it connects with the proposed new plant at Tomago.

The Hexham receiving station site.

The Hexham receiving station will occupy only 0.25 ha of the site, and will link the pipeline to the broader gas network. The receiving station will consist of piping, and equipment to facilitate the filtering, metering, flow control, and communications for the safe operation of the receiving station.



LEGEND

Pipeline Corridor		Primary Project Area	
	Hexam Receiving Station Site		Access Road
	Option 1 & 2		Proposed Gas Plant Site
	Option 1		Lot 105
	Option 2		Highway
	Hybrid Option		Roads
	Gas Pipeline Access Corridor		Vehicular Track
			Railways
			Waterbody

Disclaimer: While AGL has taken great care and attention to ensure the accuracy of the data represented on this map, no liability shall be accepted for any errors or omissions. No part of this map may be reproduced without prior permission of AGL.

Key findings of the Environmental Assessment

The Environmental Assessment considered the following key issues:

- > Soil
- > Surface water and groundwater
- > Water and Wastewater Servicing
- > Flood
- > Flora and Fauna
- > Bush fire
- > Aboriginal and Non Aboriginal Cultural Heritage
- > Socio-economic
- > Visual amenity
- > Traffic
- > Noise and Vibration
- > Air quality
- > Preliminary hazards and risks
- > Stakeholder Consultation

The EA provides a comprehensive assessment of the potential impacts of this Project. A brief summary of the key environmental concerns and the mitigation strategies to manage the concerns have been captured here.

Soil and water management

A key concern is the risk of contamination to the soil and underlying groundwater in the Tomago Sand beds. The sand beds contribute approximately 20% to the region's drinking water supply which is about 200ML daily.

Apart from the initial pipeline and plant construction, ongoing operation of the gas facility is not considered to be a high risk to the shallow groundwater. Protection measures are proposed to protect the groundwater against the risks of potentially contaminated surface water. These include:

- > Controlling all stormwater runoff from construction sites.
- > Providing sedimentation basins for all surface water runoff from disturbed areas.
- > Building temporary and permanent infrastructure to capture any spills or leaks.
- > Collecting and storing water before transporting offsite for treatment or disposal.
- > Ongoing water quality monitoring to ensure criteria limits are satisfied.

Bushfire management

AGL proposes to build the gas storage facility on a 28 ha parcel of land within the larger 250 ha industrial site at Tomago. The majority of this land is forested and therefore subject to some bushfire threat. A cleared minimum buffer zone of 25 metres will be maintained around the gas plant site increasing

to 31 metres around the processing plant and storage tank to minimise the bushfire risk. The facility has been designed to operate with low potential bush fire threat.

Flora and fauna

Up to 25 ha of vegetation will be removed within the Primary Project Area. An extensive range of environmental safeguards, mitigation measures and monitoring and management programs will be implemented to avoid or minimise impacts. Table T-075 in the EA describes the residual impacts on significant species and the proposed mitigation measures.

Offsets will be provided and a strategy will be developed in consultation with the Office of Environment and Heritage (OEH - the former DECCW), and the Department of Planning and Infrastructure (DPI - the former DoP).

AGL will also closely consult with local stakeholders who have community leadership in restoration and habitat protection (including the Hunter Botanic Gardens at Tomago) to develop long term sustainable community partnership programs.

Cultural heritage

The project is on the boundary of two Local Aboriginal Land Councils (LALC), Awabakal LALC (south of the Hunter River) and Worimi LALC (north of the Hunter). The Hexham portion of the project is predominantly associated with the Awabakal clan subgroups, the Pambulong and the Ash Island Clan.

There is potential for the Project related activities to disturb Aboriginal cultural heritage sites. Management procedures will be developed in consultation with the appropriate LALCs to ensure that in the event that any Aboriginal cultural heritage sites, features or artefacts are unearthed during construction, there will be a process to ensure they are protected.

Social and economic

The social economic assessment focussed on the areas of Tomago, Hexham and Heatherbrae. Closest to the site is Tomago which is primarily an industrial community with a residential population of approximately 95. The gas plant itself will not impact on the productivity of agricultural land as it is located within land zoned industrial.

There will be some short term flow-on benefits to local contractors and local businesses particularly during construction. We expect that nearly 300 jobs will be generated during the construction period.

The long term social benefit of the project will be positive through the security of gas supply to the region.

Visual, Traffic, Noise

Due to the distance of the primary project area (about 1km) from the main Tomago town, any associated visual, traffic and noise impacts should be minimal during construction. Ongoing plant operation will have minimum impact on the local community. The pipeline along Old Punt Road will be installed below ground so local impacts will be minimal.

Air quality

A cumulative assessment indicates that the operation of the plant would not exceed impact assessment criteria.

Fugitive dust is likely to be the main concern during project construction. This could be generated by road works, site preparation, including the access road, pipeline access corridor, pipeline construction and within the plant site. This will be managed through normal contractor controls, such as water trucks.

The design and construction of the project will be in line with energy-efficient technology. There will be some gas emissions as part of standard operations created through the liquefaction process (i.e. the process to make liquefied natural gas). As is standard practice in gas facilities, the plant will have a flare to release gas build up from time to time.

Preliminary hazards and risks

The Project is classified as a Major Hazard Facility and as such stringent operational requirements are mandatory. The EA reviewed hazards and risks associated with fatality, injury, event propagation (such as jet fires, flash fires, and explosions). The EA made conservative assumptions and was considered to be within acceptable limits.

Consultation

AGL has consulted extensively over the past 12 months with relevant State and local government agencies, as well as local residents, landowners and businesses potentially affected by the project. AGL will continue to liaise with stakeholders and the local community.

Exhibition Period

The Public Exhibition of the Environmental Assessment for the Project will take place from 24 June 2011 to 29 July 2011. Exhibition locations are available from the AGL website.

Submission Process

If you wish to make a submission regarding the environmental assessment please refer to the "How to make a submission" information page on the AGL website.

Energy in
action.®



For further information:
Visit agl.com.au/NewcastleGSF

Or contact:

Arianna Henty
Land & Approvals Manager

Phone: 1300 473 660
Email GSF@agl.com.au

AGL-MCR-000019

