

AGL Camden Gas Project

**Camden Community Consultative
Committee**

Quarterly Update
December 2016

AGL Energy.

Business Update.

AGL to deliver solar benefits and savings to NSW community housing tenants

- › AGL and NSW Government have partnered to invest \$1 million to deliver solar energy and help reduce energy costs by around \$420 a year for community housing tenants in Sydney.
- › AGL and the NSW Government will each invest \$500,000 into the pilot program that will see around 250 households have solar panels, a digital meter and monitoring system installed at no cost. You can read more [here](#).

Energy Markets

- › AGL has launched its market-leading energy plan which gives customers unlimited charging for their electric vehicles for just \$1 a day, anytime of the day, any day of the week, on a 12-month plan. Find out more [here](#).
- › Customers on this plan will automatically participate in the AGL's Future Forests program under which AGL will plant trees or invest in carbon offsets to match the carbon emissions associated with their electric car charging.

AGL Macquarie

- › Employees at AGL Macquarie's Liddell and Bayswater power stations have voted to support a new three year Enterprise Agreement for 2017 to 2019, with 87.5 percent of the 480 employees participating voting in favour of the new agreement. You can read more [here](#).

Gloucester Independent Community Legacy Fund

- › 50 new jobs created as part of Legacy Fund. You can find more [here](#) and [here](#).
- › EOIs and full applications received and assessed quarterly – ongoing. Find out more [here](#).

An orderly energy transition

- › AGL is calling on governments to collaborate to deliver an orderly transition of the energy system. You can read more [here](#) and also [AGL's submission](#) to the Parliamentary Inquiry into the Retirement of coal fired power stations.

Camden Operations.

Well Summary.

Production Well Status	Total (as at 10 September 2016)	Total (as at 13 December 2016)
Drilled (total wells)	144	144
Producing and dewatering wells	92	92
Suspended	32	32
Decommissioned and rehabilitated*	20	20

*A detailed analysis will be provided in the March 2017 meeting.

Camden Operations.

Field Operations.

Production wells

The annual Leak Detection and Repair Survey was completed by external specialist contractors in November 2016. The scope of the survey included all producing and suspended well sites, gas gathering lines and the Rosalind Park Gas Plant. AGL is expecting to publicly release the survey results in early 2017.

Well workovers

AGL's Workover Rig has completed Plug and Abandonment works in Gloucester and is now supporting our Queensland assets. The Workover Rig is expected to return to Camden in January 2017 and will commence a program of maintenance on existing production wells and plug and abandonment on non-producing wells.

Well site rehabilitation

In November, the EPA completed a site inspection of seven well sites that were plugged and abandoned over the last 12 months to assess the performance of the vegetation rehabilitation. The EPA determined that all sites AGL had satisfactorily rehabilitated each well site in accordance with license conditions. Each of the sites have been returned to the landowners.

There have been no new wells plugged and abandoned since the last CCC meeting, however four wells (RP03, RP04, RP05 and RP11) on the Rosalind Park property remain partially plugged and abandoned and works are expected to be completed in early 2017.

Planning for final project rehabilitation continues as per AGL's announcement on 18 November 2016.

Camden Operations.

Gas well decommissioning and rehabilitation.

When coal seam gas wells are no longer required, it must be decommissioned and the site fully rehabilitated to standards set in the NSW Government's [Code of Practice for Coal Seam Gas](#) (Well Integrity).

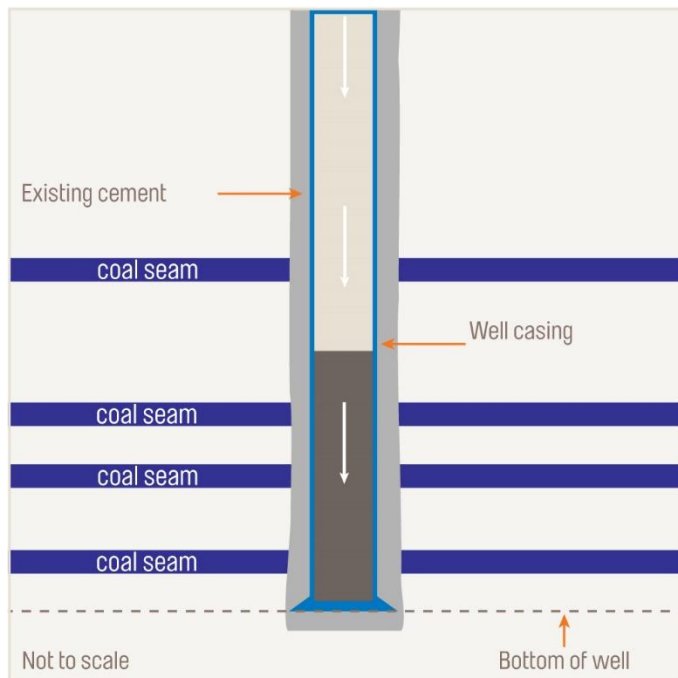
The code of practice requires that coal seam gas well decommissioning ensures the "environmentally sound and safe isolation of the well, protection of groundwater resources, isolation of the productive formations from other formations, and the proper removal of surface equipment."

In rehabilitating its well sites, AGL will ensure:

- The well's surface equipment and subsurface equipment is safely removed.
- Purpose-specific cement, which complies with the standards is placed inside the well from bottom to top in stages. The impermeable cement seals the wellbore and adds to the integrity of the well casing which already has several layers of steel and cement.
- The well casing is cut off, at least 1.5 metres below the surface, so that it does not interfere with agricultural and other future land uses.
- A steel cap, containing data such as the name of the well, the exact location, the well depth and when it was decommissioned, is attached to the top of the casing. This information also is recorded by the NSW Government so that accurate records can be maintained.
- The site is rehabilitated to the satisfaction of the land owner and our licence requirements.

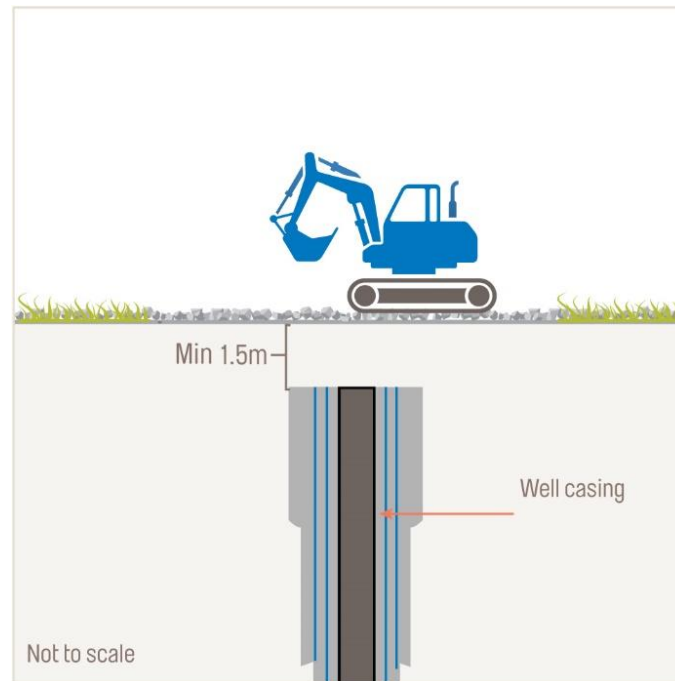
Camden Operations.

Gas well decommissioning and rehabilitation.



Step 1: Cement plug

A first 200m-long cement plug is injected and allowed to set for at least six hours. It is then pressure-tested before adding the next cement plug. Cement is then placed in additional stages to full depth and allowed to set.

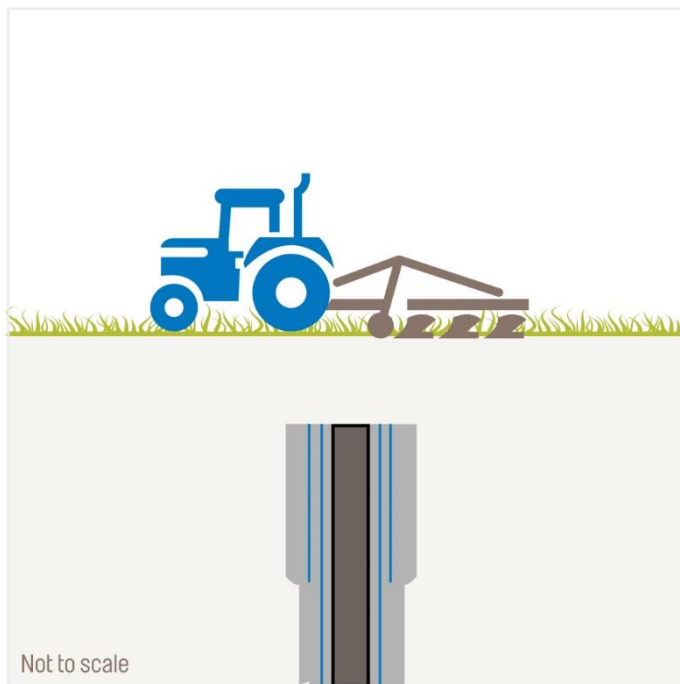


Step 2: Well capped

Well casing cut to at least 1.5m below ground level. Well is capped with a steel plate inscribed with well details. Surface rehabilitation is then commenced.

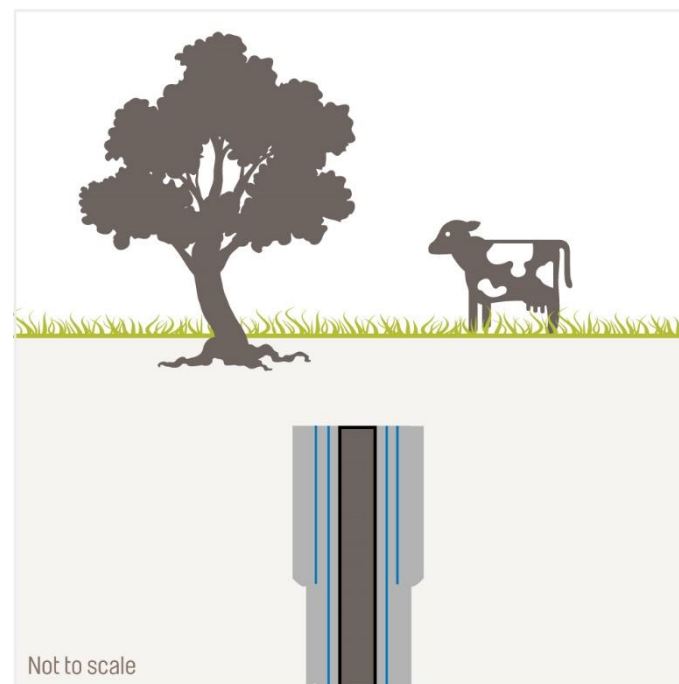
Camden Operations.

Gas well decommissioning and rehabilitation.



Step 3: Site rehabilitation

Site rehabilitation to the satisfaction of the landholder and EPA sign-off obtained.



Step 4: Returned to landholder

Site returned to the landholder for productive use.

Camden Operations.

Gas well decommissioning and rehabilitation.

Well Name	Well Number	Year drilled	Local Government Area
Elizabeth Macarthur	16	2005	Wollondilly
Elizabeth Macarthur	34	2007	Wollondilly
Glen Lee	16	2006	Camden
Joe Stanley	01	1999	Wollondilly
Joe Stanley	03	1999	Wollondilly
Joe Stanley	04	1999	Wollondilly
Lipscombe	01	1999	Wollondilly
Menangle Park	01	2010	Campbelltown
Menangle Park	05	2009	Campbelltown
Mount Taurus	09	2004	Wollondilly
Mount Taurus	10	2004	Wollondilly
Rosalind Park	02	2003	Campbelltown
Rosalind Park	06	2003	Campbelltown
Rosalind Park	10	2003	Campbelltown
Rosalind Park	12	2003	Campbelltown
Sugar Loaf	09	2008	Campbelltown
Wandinong	06	2003	Wollondilly

Camden Operations.

Rosalind Park Gas Plant.

Noise Monitoring

September 2016 quarterly results were compliant with licence limits.

Air Emissions Monitoring

All monthly and September quarterly stack testing results were compliant with licence limits.

Annual Environmental Performance Report

The 2015-2016 Annual Environmental Performance Report was publicly released on 01 November 2016. The Report provides a detailed description of AGL's environmental performance over the reporting period and assesses the performance against all regulatory requirements and performance measures that the Project is required to comply with.

The 2015-2016 Annual Environmental Performance Report is available from the Camden Gas Project [Document Library](#).

Land & Approvals.

Business as usual.

- Landholder consultation and planning for well decommissioning and rehabilitation

- AGL lodged an application to modify the Development Consent DA 282-6-2003-i MOD12. The modification purpose is:
 - » to address regulatory duplication across the Consent, Environment Protection Licence and legislation.
 - » Camden Gas Project will be subject to the same regulatory conditions after the grant of a modification, as those to which it was subject beforehand.

Community & Stakeholders.

Reviewing Stakeholder Engagement standards, policies and procedures.

Community Engagement Policy

Effective community engagement enables AGL to become a trusted and valued member of the community.

Review and update Community Engagement Policy to ensure consistency across AGL generation fleet and activities.

Community Complaints Policy

Establishes AGL's commitment to effective management of community complaints about AGL assets, planned projects and activities or new emerging contexts.

Will review at March 2017 meeting in detail.

Engagement with business and community groups

Continued engagement with business and community groups.

2016 Sponsorship of Christmas in Narellan.