

How Flawed Processes Failed the People of the Gloucester-Stroud Valley

**Three Case Studies of Coal Seam Gas Exploration
Governance in the Gloucester Basin**

**Submission to the Select Committee on Unconventional Gas
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Preface

This submission shows that the laws and policies of the Commonwealth and the State of NSW and their implementation allowed CSG exploration in the Stroud-Gloucester valley to fail its people.

The stated aims of the legislation and policy were not met. The steps that a reasonable citizen might expect to be taken during evaluation of the exploration were not taken. The balances between profit and environment, and between expedience and prudence, were not maintained.

The management of exploration for CSG in PEL285 by Lucas-Molopo and AGL over twelve years (under several governments) did not adequately protect the environment, the health of the residents or the rights of the people. The processes did not properly assess either the science or the economics of the proposed development.

There is a large body of evidence that shows a pattern of many benefits given to the project's proponents and many obstacles put in the way of the community. While only a fraction of them will be shown in the case studies below, Groundswell has previously prepared detailed reports which are available to the enquiry (see bibliography). The evidence forms an overwhelming picture of a government captured by an industry. Time and again we have seen the policy makers and regulators act for the gas industry by:

1. Functioning as public promoters for the industry.
2. Deceiving the community by purporting to regulate and monitor, when in fact they leave this up to the proponent in most instances and rely almost entirely on the proponent and their sycophantic consultants. Breaches are only brought to light by community volunteers.
3. Being intertwined with industry through coordinated communications, in working with the proponents to find ways to get around policies and legislation that were difficult or expensive for the proponent to deal with, and working with the proponents to quell community opposition, rather than actually dealing with the many real problems with the project.
4. Obscuring processes and then formally and informally refusing access to information about them.

The argument is in the form of three case studies. To understand the details and to verify the sources behind the claims you will need to study the background documents.

Flaws in the Project Approval – Case Study #1

Outline

There was some minor CSG exploration in the Gloucester basin during the 1980s and 1990s. PEL285 was issued in 1992 and Lucas-Molopo (LM) bought it in 2002. LM produced *The Gloucester Coal Seam Gas Project Concept Plan and Preliminary Assessment Report* in July 2008. The LM application for development was received by the Department of Planning 6 August 2008 and the project was declared subject to Part 3A of the EP & A Act 21 August 2008.

On 18 November 2008 the Minister delegated determination of the project to a Planning Assessment Commission. AGL bought the PEL from LM in December 2008 and released an Environmental Assessment in November 2009. The PAC approved the project, subject to conditions, 22 February 2011.

The state approval included dozens of conditions to be dealt with before production commenced. The subsequent federal approval echoed the state conditions and added more conditions. There are a number of significant problems flowing from the way the evaluation was managed.

Key Science Not Evaluated

The Environmental Assessment (EA) submitted by AGL was totally inadequate and should never have been endorsed by the Dept. of Planning. Such critical areas as:

- fracking,
- protection of groundwater and surface water as well as associated ecosystems, and
- disposal of waste products,

were mentioned only in passing rather than providing the necessary information and analysis that should be used for a proper assessment. Detailed studies of these matters and others were put off to the future.

The extreme complexity of the basin geology and hydrogeology has been known for decades and this complexity magnifies the potential problems with the issues above. This factor was likewise passed over quickly. The possibility of cumulative impacts due to adjacent coal mines was not examined in the EA.

From a scientific point of view it is farcical that the Government could have accepted the Environmental Assessment as a document suitable for its assessment process.

Onus of Proof

Despite acknowledging the Precautionary Principle the process effectively contradicted it by giving approval in the face of considerable uncertainty. In the areas where there was scientific uncertainty about the outcome instead of the onus being on the proponent to show the project was safe it was in effect thrown on to regulators such as the EPA and the community to show that it wasn't safe.

Any regulator who might be courageous enough to speak up was then in the position of having to make the case to stop the project rather than AGL having to make the case to continue. The proponent was given momentum and the benefit of the doubt.

In a political climate where we saw many times that Ministers and senior public servants were promoting the CSG industry, and this project in particular, how many public-service scientists or consultants would risk their career prospects by trying to stop the juggernaut?

Doubtful Economics

In many places in the AGL EA the economic value of the project is assumed but not demonstrated and the language was always qualitative. This seems

anomalous given the elaborate quantitative modelling that generally accompanies proposals for extractive industries but the NSW Dept. of Planning found no flaw with this and recommended the project.

The economic case was often put in the negative; that is the costs of not proceeding. The costs of not proceeding put were (briefly):

- continued reliance on interstate gas,
- a future shortfall in gas causing the use of more greenhouse-gas intensive fuels,
- increased cost of gas,
- loss of regional economic growth,
- loss of private sector investment in electricity generation,
- loss of economic benefit of development beyond currently proposed and
- loss of state royalties.

Other than the final item, which although unquantified is indisputable, no cogent justification was produced for any of these costs and losses. Since then industry and government speakers have frequently tried to develop these themes.

The scope of analysis was always carefully constrained to the issues the proponent saw as beneficial to their cause. In particular no analysis was done on the possible costs to other industries that might suffer as a result of the project proceeding. The possibility of harm to the environment reducing agricultural productivity was waved away. The likelihood that such harm or loss of views and ambience would stall tourism or retirement immigration was ignored. Happy coexistence of the project with all residents and industries was assumed by government and industry without ever being demonstrated. Once again the onus of proof was thrown on to those who questioned the project to show if there was a problem.

No Appeal or Scrutiny

The practical consequences of the conditional approval were that under the umbrella of a Part 3A determination (that precludes a merits appeal) *evaluation of a great many unknowns and uncertainties were exported to future management plans and reviews of environmental factors*. Importantly, these future considerations had no right of appeal or right for public comment to be considered. Comments were accepted by authorities but there is no evidence of any notice taken.

Over the years commentary from experts and community groups focussed on the inadequacies of the original approval and the fact that so many of the issues remained outstanding but the process had been manipulated so that critics of the project could by law be safely ignored. Those issues are unresolved to this day.

The project was approved under Part 3A in the dying days of the previous state Labor government. While the Coalition now in power may have repealed Part 3A, in this case they willingly took up the process set in train by their political opponents and used it to promote the project and to silence and to disempower the community whenever possible.

The Tiedmans Irrigation Project – Case Study #2

Trial Conduct

AGL inherited all the wells and infrastructure built by Lucas-Molopo and their predecessors, which included some dams containing produced water. Some of this water had been sitting there for years with no clear plan for its disposal. With the prospect of flow testing of more CSG wells generating more produced water a method of disposal was required.

In February 2012 AGL lodged a Review of Environmental Factors (REF) and supporting documents applying to commence an irrigation trial. The EPA officer responding to the Dept. of Trade and Investment on behalf of the EPA and OEH said "The proposal is referred to as a trial however the purpose and objectives of the proposal is unclear." The EPA went on to request that a program of monitoring and trigger points should be made a condition of approval so that if problems arose the regulators would know about them and could act. Clearly at this early date the EPA was concerned. This report only became public after being published in the press.

Produced water in the dams contains significant quantities of dissolved salts; sodium, potassium, chloride, carbonate and bicarbonate ions are major components with smaller amounts of many other ions including light and heavy metals, as well as small quantities of hydrocarbons.

AGL planned to mix produced water with surface water from local dams and to irrigate it on to plots of land (given considerable treatment with fertiliser and soil amendments) to grow salt-tolerant fodder crops. This plan was duly approved and the irrigation program commenced. According to AGL more than 1000 bales of fodder were sold to local farmers during the course of the project. This was described a "beneficial reuse" of produced water.

There were many problems with the project that was represented as a trial. As a scientific study it was wanting in that the design of the application of the blended water could not answer the necessary questions that were essential if the objective was to find the circumstances where blended water could be used safely for irrigation in the long term. Also the trial was not conducted for long enough to determine if it was sustainable.

One problem from the start was that the dissolved salts were not expected by AGL and its consultants to become a problem in the long term in any way. Independent advice was readily available to challenge this position but it was ignored by regulators.

All irrigation water contains some salts. It is fundamental to any irrigation project that the salts must go somewhere, the higher the content of salts the more this becomes an issue. AGL assumed that the solids would not stay in the soil (thus rendering it saline and useless over time) they would not be taken up in harmful amounts by the crops and would not run off and do harm to the nearby river. They never said where they thought the salts would go.

Trial Results

Analysis of the produced fodder showed that some of the salts and toxic chemicals were being taken up by the crop and these were reaching risky levels.

For some minerals the concentrations were a significant proportion of maximum tolerance level for stock. The consultants to AGL, ANCS, recommended that for various classes of stock this feed should not exceed between 20% and 90% of the diet of the stock. After only two years of operation signs had appeared that the salts did not just benignly disappear.

In March 2015 AGL tried trucking the water to be treated to Newcastle where, despite explicit directions from Hunter Water to the contrary, the treated water was put into the sewerage system. This illegal disposal was only revealed by community action. Subsequently the water was trucked to QLD as this became the nearest legal method of disposal available.

In April 2015, as the approval for the project was about to expire, AGL declared the trial a success. John Ross, Hydrogeology Manager, said a decision was made not to extend the program after careful consideration.

"We've been really happy with the results from the Tiedmans Irrigation Program and as we only have a very small volume of produced water left, we made the decision not to apply for an extension of the program," Mr Ross said.

If irrigating on to nearby plots was such a great success why was it necessary instead to continue to truck water interstate at great expense?

The trial concluded with no answer to the question of whether produced water could be safely sprayed on to crops or pastures in the long term but early results suggest not. No cost-benefit analysis was produced showing the method was commercially viable if it was safe. Success was framed in terms of the amount of fodder produced and the disposal of some 50 ML of unwanted water over two years.

Comment of the Trial

During the trial community organisations and qualified experts continued to question the process and the outcomes. Detailed questions were asked of AGL through their meetings with the Gloucester Council (The Gloucester Dialogue) but these were not answered. State agencies remained largely silent. AGL produced a series of vague happy media releases.

The declaration of end of the trial avoided further scrutiny and, as negative evidence accumulated, avoided possible embarrassment all round should the consent authority be forced to refuse an extension.

If the aim was to get rid of most of the unwanted produced water without the expense of building a reverse osmosis plant or trucking it away it was a great success.

This is presented as an example of the way that risky and unsustainable activities can be obscured behind the screen of a REF. This technique was used again.

The Waukivory Pilot – Case Study #3

Problems with Approval

The Waukivory Pilot consisted of AGL fracking and flow-testing four previously drilled wells at Forbesdale. AGL lodged a Review of Environmental Factors (REF)

to obtain permission for the Pilot in October 2013. Several weighty amendments and addendums were permitted by the regulator rather than declare the original was inadequate. A REF does not require the rigour of an EIS and in particular it does not require that public submissions are considered. AGL declared that they had done as much work as a full EIS but gave no reason why they would not do one other than it was not required legally.

In November 2013 The Environmental Defenders Office (EDO) made representations on behalf of Groundswell Gloucester to the state government that according to the State Environmental Planning Policy (SEPP) in force such a project could not be approved under a REF but a full EIS was required. In brief, the SEPP at that time contained a provision called the 'five wells rule' which limited accretion of a gas field by degrees without a full EIS. If the wells proposed to be fracked were too close to existing wells a REF would not suffice.

Soon afterwards AGL plugged and abandoned the existing well that was closest to the proposed pilot. This well was productive, it had been previously capped to allow it to be brought into production at some future time. Given the cost of drilling and fracking each well arbitrarily abandoning it made no economic sense.

In February 2014 the Office of Coal Seam Gas and other agencies attended a 'round table' discussion at Gloucester with Groundswell members and committee. At this meeting the Director of OCSG promised to reply to the EDO letter before any decision was made on the REF. No reply about this was ever received from government.

On 2 July 2014 the Department of Planning changed the relevant SEPP. The way the five wells rule was measured was revised so that the Waukivory Pilot no longer breached the SEPP. Thus a REF would suffice to approve the project instead of an EIS: problem solved.

On 6 August all pending approvals were released together. The Waukivory Pilot REF was approved. The renewal of PEL285, which had passed its expiry date, was approved and the outstanding Environmental Protection License from the NSW EPA was issued. On the same day, within hours, trucks arrived at the work site, some from interstate, and security fences were being erected about the AGL office at Gloucester. Clearly AGL managers were given forewarning.

Problems with the Pilot

The Pilot started operations and began to produce gas flow data after many more delays. It was suspended for months when toxic BTEX hydrocarbons were discovered in the fluids being withdrawn from the wells. The state was at pains to point out that these are naturally occurring substances in coal seams and that AGL had not breached the condition that BTEX should not be employed in fracking fluids. The occurrence of such substances was not unexpected to anybody but the EPA and AGL who had no detection and monitoring methodology in place to deal with this eventuality.

The Gloucester Dialogue (the regular closed-door and un-minuted conference between AGL, agencies and Gloucester Council) met during this period but were told nothing about the BTEX. Within days after the Dialogue meeting the finding was announced. Gloucester Council then banned AGL from the Dialogue on the grounds that they were not fulfilling their promises to provide prompt, accurate and complete information to the Council.

This is representative of the pattern by both AGL and the state government of controlling information. While volumes of promotional material were readily available, valid requests for technical data and to view approval documents were repeatedly ignored. This forced the community to go through costly and time-consuming GIPA processes to get information. Contrary to regulatory conditions, the government only required AGL to publish the information they wanted to publish; not to genuinely communicate by providing the information the community needed.

Comment on the Pilot Evaluation Process

AGL and the state were most reluctant to allow an EIS to be produced regarding the Waukivory Pilot and eventually had their way. At a meeting with the then Planning Minister (Pru Goward) Groundswell representatives asked where the enabling SEPP change came from, the Minister said from the Office of Coal Seam Gas. At a meeting on the same day the Director of OCSG was asked where the SEPP change came from, she replied several times that it was approved by the Minister for Planning. When the question was repeated she flatly refused to say where the change originated.

At a later meeting with the Deputy Secretary Dept. of Resources she was also asked about the origin of the SEPP change and refused to answer. When it was suggested that her subordinate, the Director OCSG, was less than forthcoming the Dep Sec replied "that must have been terrible for you". At the same meeting the Dep Sec was dismissive of questions about the Pilot approval processes being concealed by refusing GIPA requests. She said that GIPA requests wasted her staff's time and what is done is the past, we should all move on.

The same Dep Sec wrote in her official capacity twice to the Gloucester Advocate to support the AGL Gloucester Gas Project repeating many of the industry claims about the benefits of the project.

On 3 March 2016 the Civil and Administrative Tribunal NSW ordered documents that had been concealed under GIPA provisions relating to the Pilot to be released. At the time of writing they had not been received.

The Conclusion of the Project

At the end of 2015 flow testing at Waukivory was terminated. At that time, nearly five years after conditional approval, no project conditions had been approved.

AGL announced that it was quitting Gloucester 4 February 2016 only days before their Part 3A approval expired. AGL will also cease operations at Camden a decade sooner than planned. These decisions were followed within a fortnight by the announcement that AGL had pled guilty to criminal breaches of political donations laws – the facts of which had been presented in detail to the Department of Planning some 14 months earlier. Planning sat on the problem until it no longer mattered.

Independent economists have often refuted the economic benefits claimed by AGL and now it is clear they were right.

- AGL has renewed contracts with VIC suppliers and NSW continues to rely on interstate gas as it has for decades. Contrary to AGL predications there will not be a shortage of gas for heating in Sydney this winter. One predication

made by AGL has come true, the Moomba pipeline started to run backwards, that is gas from NSW is going north to the QLD export market. Also AGL has released more gas from its holdings in QLD than Gloucester could have produced. *The great gas shortage, used to justify the Gloucester gas project, was a furphy.*

- As more gas has become available on the east coast we have seen, contrary to prediction, the proportion of gas-generated power fall. This perverse outcome is due to the rise in the price of gas in relation to coal. Consequently, had the project gone ahead there is little prospect there would have been increased private sector investment in gas-fired electricity generation or any reduction in greenhouse gas emissions by burning CSG instead of coal.
- The cost of gas has increased but not due to the lack of local gas but because the domestic market has been linked to the export market. A small field such as Gloucester would not have had any effect on that outcome.
- The regional economy now has the prospect of future growth. Within days of AGL's announcement local real-estate agents experienced a sudden burst of enquiries for properties. Residents who were planning to move out are now reconsidering.
- The imagined economic benefits of development due to but beyond the AGL proposal (such as a gas-fired milk factory at Gloucester) are as fanciful as ever.

Final Words

How did this monstrous misadventure come about? As AGL has written off many hundreds of million dollars there are shareholders who would like to know. Consider also the great waste of public resources defending, supporting and finally backpedalling in regard to a project that should never have gone ahead.

More than the monetary cost there is the cost to the valley residents whose mental health, trust in government, sense of security in their property and lifestyle, and community cohesion have been seriously damaged.

It wasn't any particular political party who bent the approval process but a triumvirate which set out for their own purposes to make CSG the next big thing in energy in NSW regardless of lack of knowledge at the time. The trio of politicians, senior public servants and industry insiders hurriedly got on board and agreed to collude against the communities directly affected and the electorate generally. They have been backtracking ever since.

The Commonwealth cannot be blamed for the games played after state approval or the ongoing confusion of CSG administration in NSW. However, the original Commonwealth approval showed how impotent and uncritical the Federal processes are by endorsing the quite inadequate material the state put up without demur or comment and by then regurgitating the state approvals.

The valley community wanted nothing more than good science and justice to guide the process that would determine the future of their valley and for the evaluation to be transparent. What they got was bias, obfuscation and spin.

END

A Partial Bibliography

These documents are available for download on the Groundswell web site:
<http://www.groundswellgloucester.com/info.html>

9/11/15

Call for AGL shareholders to divest

20/5/15

AGL given the green light again

19/5/15

What does it take for Minister Roberts to act?

29/4/15

AGL's corrosive bacteria nightmare

24/4/15

Outrage at AGL's Gloucester CSG incompetence

9/4/15

AGL to flare gas after discovery of CSG leak at Gloucester

27/1/15

BTEX Chemicals Found in AGL's Waste Water

19/1/15

No Testing for Toxic Tocide

14/11/14

The NSW Gas Plan

7/11/14

Illusions of Transparency: The Gloucester Dialogue

5/11/14

Councillor Aled Hoggett: AGL and Government Consultation a Farce

28/10/14

Office of Coal Seam Gas chemical check blunder with AGL fracking plans

30/9/14

Comments on New AGL Media Campaign

10/9/14

AGL fails to adequately monitor methane emissions in Gloucester

19/8/14

AGL endorses confrontation in Gloucester

14/8/14

Call for freeze on Gloucester gas project as auditors investigate AGL's political donations

11/8/14

AGL misled public over political donations for Gloucester gas project

31/7/14

AGL, Produced Water and Reverse Osmosis

8/7/14

NSW Government changes law to fast-track fracking at Gloucester

29/5/14

Reality Check needed for Milk Factory

22/4/14

Land Access Inquiry Welcomed

11/4/14

AGL Overly Optimistic about Water Quality

9/4/14

Response to AGL Tiedman Irrigation Program

31/3/14

Window Dressing by the O'Farrell Government and AGL

5/3/14

Call for Local MP to respond to medical warnings on CSG fracking

29/1/14

Gloucester rejected - we feel cheated!

29/1/14

Flaws in AGL's Gloucester Gas Project Exposed

16/1/14

O'Farrell Government begins to investigate CSG risk to the Gloucester community in AGL's plans to frack.

18/12/13

Salt Water Games

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Exposing the Risks

10/12/15: Gloucester Council Notice of Motion

8/11/15: AGL and Environment, Social and Corporate Governance (ESG) risk

31/7/15: Twenty Points to Achieve Balance

3/6/15: Submission to IPART: Landholder Benchmark Compensation Rates

1/6/15: Gloucester CSG Update

20/5/15: Opinion: Fracking concerns for cattle

30/4/15: Analysis of the NSW Gas Plan - April 2015

3/3/15: Land Water Future - Survey Summary

5/2/15: Exposing the Truth - Suspension of PEL285

20/1/14: **Exposing the Risks - Fundamental Flaws in AGL's application to frack CSG wells in Gloucester**

16/12/13: **Problems with AGL's Irrigation Trial**

23/10/13: **Letter to AGL Shareholders**

11/13 **EPA Input into AGL Irrigation Trial application**

30/12/12: **Situation Summary**

Note that some documents refer to voluminous source documents which are not included. These can be made available as a separate download upon request.