

History:

This message has been replied to and forwarded.

The NSW Chief Scientist and Engineer

csg.review@chiefscientist.nsw.gov.au

Dear Professor O'Kane

Attached for your information is our submission in regard to the Review of Coal Seam Gas activities in New South Wales.

Yours sincerely

Rod and Robin Besier 7 Forbesdale Close Forbesdale NSW 2422 r.besier@bigpond.com



26 April 2013 - Submission to Chief Scientist .pdf



GLOUCESTER - REVIEW OF COAL SEAM GAS ACTIVITIES IN NSW -Submission by Mr J. Kite Rod and Robin Besier to: csg.review 29/04/2013 10:26 AM

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This message has been replied to and forwarded.

The NSW Chief Scientist and Engineer csg.review@chiefscientist.nsw.gov.au

Dear Professor O'Kane

We have already sent in our submission in regard to the Review of Coal Seam Gas activities in NSW. however, we have since read with interest the submission by Mr Jeffrey Kite, who is a retired Water Resources Engineer and now lives in Gloucester. On Page 7 of Mr Kite's 17 page submission, there is a reference to the number of bores already in existence along the Gloucester Valley, quote:

"Some parts of the northern Gloucester valley resemble a pincushion with many bores at close spacings drilled to a variety of depths. Even if AGL has done a very professional job with their drilling and will undertake hydraulic testing of the cemented seals, we cannot be confident that a professional job has been done for other nearby bores. The Government agency referred to above apparently mostly depends on reports by drilling contractors to ensure that the bores are properly constructed."

We have taken the liberty of attaching a diagram from formerly Gloucester Coal's (now Yancoal Aust Pty Ltd) exploration lease of the Stratford mine area to which Mr Kite refers. We would be pleased if this could be attached to our submission, with this note referring to Mr Kite's submission.

We are concerned that the Valley may have sustained damage over many years with the extreme number of bore holes done in the exploration phase of Yancoal's Stratford open cut coal mine. Therefore, making it more urgent that a fully independent water study be done of the entire Gloucester Basin which covers AGL's Gloucester coal seam gas project.

AGL should be asked that the company suspend further exploration until a more comprehensive study is done on this complex Basin area.

Yours sincerely

Rod and Robin Besier 7 Forbesdale Close Forbesdale NSW 2422



r.besier@bigpond.com Stratford Coal - bore holes in EL1.pdf

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Welcome to Gloucester at the foothills of the Barringtons

26 April 2013

The Chief Scientist csg.review@chiefscientist.nsw.gov.au

## SUBMISSION TO THE NSW CHIEF SCIENTIST & ENGINEER REVIEW OF COAL SEAM GAS ACTIVITIES

Thank you for giving us the opportunity to comment on the Terms of Reference for the review of coal seam gas activities. We are not technical people and have to rely on information supplied to us in order to bring to your attention, our concerns about this relatively new industry and its future in NSW. We are concerned that not enough scientific information is known for the coal seam gas industry to move confidentially into production, especially in areas where there is risk of good agricultural land being depleted of its underground water supply and possibility of damage to aquifers.

**1. We call for a broadening of the Terms of Reference** so that the Chief Scientist is tasked with:

- Commissioning rigorous independent scientific research to properly assess the risks of coal seam gas mining.
- Identify best practice methods for baseline monitoring of health impacts, water resources, air quality, soil quality, and fugitive emissions.
- Identifying areas of NSW that should be off limits to coal seam gas, due to unacceptable risks and impacts.
- Reviewing the impacts of coal seam gas on agriculture and other affected industries such as tourism and manufacturing.

## 2. Address existing Terms of Reference:

**Terms of Reference 1** – We refer you to a report written by C.M. Atkinson in January 2005 where it is stated: "In September 2004, within a fortnight of the beginning of gas testing, coal bed methane well north of Newcastle, NSW was shut down as several boreholes up to 300m away began to blow off methane gas. This was the first reported case of a serious migration of methane gas from coal bed methane operations in New South Wales." –Page 10 4.STRATFORD<u>http://www.sore.net.au/wp-content/uploads/coal\_methane\_report.pdf</u>. Former CSG mining company, AJ Lucas/Molopo Aust Ltd was subsequently bought out by AGL in December 2008.

**Terms of Reference 2** – Our concerns are that there is the lack of baseline data and ongoing monitoring on health, water, air quality and fugitive emissions. The most fundamental risk management strategy must be the creation of strict no-go zones for farmland, existing industries, water resources and important natural areas. **Terms of Reference 3** – The best practice in CSG management should include a minimum 5km exclusion from residential zones, a minimum 2km exclusion from all residential dwellings, mandatory health impact assessments, and the right for communities to say 'no'. The NSW Government just recently stated that there would be 2km exclusion zones around City residential areas, horse studs and vineyards. We feel rural residential and residential areas in agricultural regions have been discriminated against by this new policy. Within AGL's **Gloucester** Gas Project, several homes are situated within 400 metres of a capped productive gas well at Forbesdale; this is not Stage I, but will be part of Stages II or III.

**Terms of Reference 4** – The overwhelming information coming out of the USA in Philadelphia and Wyoming in particular, those landholders are experiencing problems not ever seen before, with bore water rendering it too contaminated to drink. The gas companies do not acknowledge they have caused the problems but the US Government has been slow in proving otherwise. Please do not let NSW go down the path that 'maybe' there is a problem with gas escaping into aquifers and ground water and not prove otherwise.

**Terms of Reference 5** – We would invite you to visit Gloucester to inspect current drilling practices including water extraction and retention, hydraulic fracturing results and aquifer protection technique, as Gloucester is only the second area where approval has been given for CSG to be extracted. It appears the Gloucester approval was a political decision and not at all based on scientific knowledge.

**Terms of Reference 6** – Before it is too late, we need to have independent scientific research to assess the risks from coal seam gas operations and comprehensive baseline monitoring, not more information sheets.

In November 2010, we wrote to the CSIRO, asking if the Organisation had done any studies of the aquifers on the Gloucester Basin. This was their reply:

"CSIRO is assessing the availability of coal seam gas resources at a number of sites around the country, including Gloucester, and we are researching the gas flow properties of coal at these locations. However, we are not currently involved in research projects conducting coal seam gas extraction, nor coal mining in that region, and therefore not in a position to comment as to how it may impact its aquifers and water supply." CSIRO then referred us to NSW Government Department of Primary Industries, Minerals and Petroleum Dept.

Until more information is known about the connectivity between aquifers and groundwater, all further exploration/extraction by coal seam gas companies should be put on hold until this study has taken place. What is the rush? The scare-mongering by politicians should cease. Australia can still produce natural gas for its domestic use, for decades to come until such time this new extraction method can be proven. If extraction is rushed, without reliable scientific proof, we could lose something more precious for generations to come, our water.

It is incomprehensible that AGL or any other proponent of a coal seam gas company is allowed to proceed without a fully independent hydrological study done of entire projects where coal seam gas is proposed. Have you read Professor Philip Pells' report which was done last year on AGL's 'peer review' of just a small area of only Stage I (110 gas wells), without taking into consideration Stages II and III of the 330 gas well project?

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Yours sincerely

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Robin Besier

Rod Besier

