

**Submission  
No 240**

## **INQUIRY INTO COAL SEAM GAS**

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Dr Rochelle Braaf & Mr Crispin Bailiff

The Director  
General Purpose Standing Committee No 5  
Parliament House  
Macquarie Street NSW 2000

7 September 2011

Dear Sir/Madam

We make the following submission to the NSW inquiry into coal seam gas activities, including exploration and commercial extraction activities.

**1. Environmental and health impact of CSG activities**

We have great concerns regarding the environmental impact of CSG on water ways, including surface water, artisan basins and urban water ways, such as at St Peters in Sydney's inner west. The extraction process of CSG draws up large volumes of underground water. The extensive volume of water extracted and the capacity to dispose of this produced water is problematic. Aside from the salinity problem created in drawing on large volumes of water, it is unclear how serious a negative impact the toxic chemicals used in the fracking process would have on water used for agriculture, drinking water, in sensitive environments and urban parklands. Toxic chemicals present in waste water from fracking processes may include lead, cadmium, chromium, mercury and BTEX – a combination of benzene, toluene, ethylbenzene and xylene. In particular, we have concerns regarding the storage of waste water and the impacts of

leakage, spillage and discharge that already have and will continue to occur. See, for example, the record of saline pond spillage in the Darling Downs during the floods earlier this year. There needs to be a moratorium on the use of drilling and fracturing chemicals until they have been independently assessed by the federal regulator.

We have concerns about noise and traffic associated with CSG in urban areas such as St Peters. Heavy machinery (including compressor stations) and use of heavy trucks will significantly increase noise levels in a highly populated urban area. This will have a cumulative effect adding to the existing relatively high noise levels in the area that already experiences the effects of industry and traffic.

It is also likely that the processes associated with CSG will add to local air pollution and increase the risk of explosion. We would want some assurance that there will be no lowering of local air quality as a result of CSG activities, particularly in urban areas but also on agricultural lands. The quality of our food sources is of utmost importance to Australian agriculture.

## **2. The economic and social implications of CSG activities**

While CSG may bring in economic gains to gas companies and state governments, local land owners and residents have a great deal to lose. The presence of CSG activities devalues agricultural and urban land.

For example, David Lesser (August 2011, 'Gasland-Australia', *Good Weekend* [Fairfax]) has reported on CSG exploration and extraction activities in Australian agricultural areas with negative impacts for local farmers including:

- one farmer experiencing methane leaking from an un-commissioned pipeline and possible contamination of aquifers by waste water collected from the extraction process ponds during recent flooding
- one farmer experiencing one of 12 coal seam gas wells on his property erupting, sending methane and water spewing nearly 100 metres into the air (one of four incidents that have occurred on the farm).

The article made it clear that although one of the families was keen to sell their property (due to negative impacts from CSG on their farming activities), property prices had diminished as a result of the CSG mining in the area and on their land.

#### **5. The impact similar industries have had in other jurisdictions**

The documentary 'Gasland' was pivotal in bringing to public and political attention the negative impacts of CSG and the fracking process in parts of the United States. For example, the documentary reported that gas seeping from land owned by Lisa Bracken in Garfield County, Colorado was found to be the result of fermenting organic matter in the West Divide Creek wetlands surrounding her property. The documentary claims that the gas seep was caused by hydraulic fracturing in the West Divide Creek area. EnCana Oil & Gas was fined \$371,200 by the COGCC and a moratorium was imposed on drilling in the West Divide Creek, Colorado area, where underground geological faulting had contributed to drilling problems.

This year, Blackpool in England experienced two minor earthquakes linked to exploratory fracking by Cuadrilla Resources. The earthquakes resulted in suspension of fracking of a shale gas prospect near Blackpool. Residents have also reported being unable to drink water from

household taps due to large volumes of methane present as a result of CSG and the fracking process.

Of greatest concern to us is the fact that very limited information about coal seam gas exploration and extraction proposed in NSW has been made available by either the energy companies or the government to the public. Residents in and around St Peters in Sydney and local government, for example, were only made aware of proposed coal seam gas drilling in the area when the Greens successfully obtained government documents under the *Freedom of Information Act*. Moreover, the industry is largely self-regulated, with governments generally reliant on information supplied by the industry itself, which is unlikely to make information available that could lead to more stringent controls or the cessation of activities altogether. Our understanding is that environmental regulation in NSW has been specifically limited for coal seam gas (at least in St Peters) and that the responsible agencies lack the resources to undertake many compliance and enforcement responsibilities.

A number of publically released documentaries and investigative news reports have highlighted the pollution problems associated with CSG activities, particularly with the process of fracking, and the flouting of environmental controls (where these are in place) by CSG companies, without adequate compensation to the people affected.

On the basis of these concerns we urge the Committee to prohibit coal seam gas mining until all water, health, and other environmental impacts are revealed, and plans to deal with the consequences and whole of life costs of remediation are put into legislation. We are particularly keen to see CSG not become the 'Asbestos' of the new century, with the companies involved

taking the short term profits and transferring future liabilities for health, property and environmental damage to the NSW government due to grossly inadequate regulation and oversight by the NSW state bodies.

Yours sincerely

Rochelle Braaf and Crispin Bailiff