INQUIRY INTO COAL SEAM GAS

Name: Name suppressed

Date received: 14/09/2011



The Director
General Purpose Standing Committee No. 5
Parliament House
Macquarie St
Sydney NSW 2000

Dear Sir/Madam

RE INQUIRY INTO THE MURRAY DARLING BASIS – IMPACT OF MINING COAL SEAM GAS

As a landholder, farmer, grazier and resident in the Moree District, I would like to make the following points on the economic, social and environmental impacts of minding coal seam gas on the following areas

1. Environmental and health impact of CSG activities

The risk to the aquifers environmentally is of enormous concern.

Water aquifers provide our home *drinking water and our stock water*. If there is any shifting of, change in pressure or contamination of these aquifers, this would affect our livelihood and also mean we may not have access to the basic necessity of water. If we had to drop new bores to find new water, the cost would be a heavy burden on our operation.

As a major user of water, CSG mining should under the State Water Acts, pay for water used and be subject to strict regulation like other water users.

I am not against CSG as an industry. I am against the industry inundating prime cropping land that has water aquifers as its main supply of drinking, stock and spraying water. Especially when there is no CSG user that will guarantee that their practices will not compromise the aquifers.

As in other countries, the hydraulic fracturing or "fraccing" should be banned.

2. The economic and social implications of CSG activities

Despite the fact that we do not want CSG mining on our property, ultimately under the law the CSG companies have the right to put up wells, pipes and roads across our entire property and with it bring huge amounts of people and machinery across our land. It is invasive of our home and family lives and our farming practices.

Unlike other forms of mining, CSG do not want to buy property, just occupy it at minimal or no cost. Suffering land values are a huge issue that may result in us and others being bankrupted. *Royalties* may be one way to correct this issue and ensure land values are maintained.

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Just compensation is needed. It should cover not only the huge inconvenience of our business and home but also the risk should things go wrong (such as reduced or loss of Ag productivity or depletion and/or contamination of our drinking water and/or fall in land values).

A government funded landholder advisor is needed to help landholders to negotiate fair agreements

and ensure that the CSG companies adhere to the land access agreements. Landholders do not have the means to protect themselves against any unscrupulous behaviour. The CSG companies are professional negotiators and often ride rough shod over landholders in the land access agreements. Sustainability of prime agricultural land

As farmers, we have spent years adopting best practices for the long term sustainability & productivity of our farming land. Dry land cropping has come a long way in a relatively short period of time with farmers adopting world class precision farming methods to the point that Australia's farmers are without peer as the most efficient in the world. This high level of sustainability is a product of moisture conservation used to combat consecutive drought years and operating in a distorted global soft commodities market where our major competitors enjoy subsidies from their governments.

Below is a list of examples of Australia's farmers methods being at the cutting edge in world agriculture
☐ Zero till farming has evolved over the past 20 years to become the norm in many cropping
areas. The basis of this farming method is the retention of the previous crops stubble to provide ground cover and maximise plant available water for the next crop. Improved groundcover has increased organic matter and humus mineralisation levels. Plant available water capacity of our soils has benefited providing increased yields and greater soil health.
☐ Controlled traffic farming. Farmers have invested millions particularly in the Liverpool and
North West Plains in purchasing machinery that allow wheel traffic from farming operations to occur on the same tracks. There has been a shift from 2 metre to 3 metre wheel centres to accommodate combine harvesters on these tracks. This practice is used to confine traffic to limited areas and allow the balance of the paddock reach yield maximisation.
☐ Farmers have also redesigned paddocks to allow for longer traffic runs and management of
water flows. This practice means there is less turning compaction at the headland of the paddock and less waste of cropping inputs. Also water flows have been altered to enable water to travel at a slower pace that reduces erosion and increases infiltration. These paddocks are now of a larger size with a common paddock size in the Moree East is being 200 hectares. They have combined these advances with Global Positioning Satellite technology to create previously unseen efficiencies.
☐ Farmers have combined with local Catchment Management Authorities to invest in
sustainability programs on cropping land to improve the ecosystem in which cropping exists. Our family farm has invested money in several tree planting areas to create windbreaks in cropping paddocks as well as provide stock shelters in weather extremes. We have located these shelters in areas that will slow down water flows and improve infiltration in cropping NSW CSG Inquiry into Coal Seam Gas Daniel Reardon Page 3 of 3 areas. We have also adopted CMA programmes to improve ground cover levels on both cropping and grazing country.
☐ Farmers have invested millions in infrastructure on their grain properties that in effect has
replaced the role of government in the rural areas. Governments of both persuasions have neglected rural road and rail networks to the point where many grain delivery points have closed and been replaced by on farm storage. It is an absolute blight on government to allow this infrastructure to fall into a state of disrepair that has resulted in good grain storage being duplicated all because the rural vote does not count. We now have farms that have the latest technology in grain storage. This storage now provides a vital component in the value chain for grain.
\square Farm safety has been a dominant issue in agriculture for the past decade. In many cases
farming had fallen behind in creating a safe work environment for all workers in the farming business. This has now changed with much invested in safety equipment such as ground operation of silos, provision of protective equipment and clothing etc. Farmers have also created whole farm safety protocols for work across the farm.
Why CSG cannot coexist with prime cropping businesses.
From reading the abovementioned points it is counterproductive to rural communities and the Australian economy as a whole to attempt to introduce CSG to firmly established cropping areas. The amount of investment in farm planning, infrastructure and machinery in the last decade in particular will go to waste. Below is list of points in the construction of a gas field that will thwart the role of agriculture.
☐ The obvious problem is having gas wells scattered 700 metres apart over a controlled traffic

cultivation paddock. In a 200 hectare field there could be up to 8 gas wells within the one field. That is 8 interruptions to the controlled tramlines, 8 areas that will be compacted by machinery traversing them, 8 areas where crop inputs are doubled up with overlap, 8 potential safety hazards for farm machinery operators to negotiate when operating machinery. Who is responsible? For the death of an operator that dies in a collision with a gas well? These wells will have pipes and roads interconnecting them creating another safety hazard when machinery comes into contact with them. The efficiencies we have spent years and money creating will be gone.
□ Farmers will be inconvenienced with the presence of CSG workers at the well sites through both the construction and commercial phases of the CSG project. Who is responsible if a 3 _{rd} party operator such as an agricultural crop duster sprays pesticides on a CSG crew if the CSG crew are not working at the site at the appropriate hours?
☐ The nature of deep self mulching clay soils will mean that inevitable subsidence will occur with the laying and removal of interconnecting pipes. The subsidence creates a safety hazard for farm workers and creates erosion as water always finds low lying areas and these pipe NSW CSG Inquiry into Coal Seam Gas Daniel Reardon Page 4 of 4 ways can and will become waterways particularly if roads run adjacent to them. These roads will also create ponding rendering those areas unproductive for cropping.
☐ CSG fields require gravel roads to connect the wells. The soil that is contaminated by the gravel is permanently scarred. It is impossible to take gravel out of clay soil once it is sheeted. The gravel is dispersed through the profile in the affected area due to years of traffic and rainfall events
Although evaporation ponds have been banned. CSG companies will require some facility in which to place excess water from the drilling process. If this is in the form of 'holding ponds' farmlands and waterways are at severe risk of one off rain events. In February 2001 525mm of rain fell on our property in 60 hours the water generated from this rain event destroyed irrigation farm and dam infrastructure 80km west how is a CSG pond going to withstand an event of this proportion. When the CSG pond breaks, who is responsible for the permanent contamination of the prime farming land? If it is the CSG company who is responsible if they go bankrupt? Let me suggest lessons that maybe used as a government learning experience i.e. James Hardie and the Woods reef mine at Barraba.
☐ Farmers have no control over the CSG workforce on their property. The Fly in Fly out nature of the industry means that there could be rapists, thieves or illegal immigrants working in our vicinity that would otherwise not be there if the industry were not in the area. Funding is needed to do <i>benchmark studies</i> on soil quality, water quality, water flows during heaverains, etc.
Funding is needed for help farmers get studies on their farms on well and road placements to minimise negative impact (otherwise they are dictated by the CSG companies and what they want). And if any productivity is affected, there must be an accessible and guaranteed "make good" fund that covers the costs and/or lost future income. Impact on regional towns and effective management of the relationships between mining and other interests
Moree has long held the title of the 'Richest Agricultural Shire in Australia': there are deeply formed

Moree has long held the title of the 'Richest Agricultural Shire in Australia'; there are deeply formed rich self mulching clay soils for 50 to 120 km in every direction of the town centre. The districts contribution to national GDP through agricultural exports is unheralded. This town will always be a centre dominated by agriculture – not CSG. The introduction of CSG will financially cripple the community mainly through lack of certainty for farmers. If CSG is imminent it stunts investment from farmers in the community i.e. they are not willing to invest in an area that may be subject to a loss in equity by the mere presence of CSG companies in the area. This lack of investment affects all the

town business houses. In essence, the introduction of CSG will 'rob Peter and pay Paul' so to speak. The only way to ease these potential problems is through amendments to legislation so that NSW CSG Inquiry into Coal Seam Gas Daniel Reardon Page 5 of 5

landholders are treated equally under the law to mining companies – anything short of this will not pass muster.

The use of local roads with heavy vehicles for these wells is large, yet they do not pay rates and are not required to make compensation to our local council – the rate payers foot the bill.

Roads must be built from well to well, which will be an enormous drain on local gravel and would most likely deplete the area of gravel supplies. This will mean our rate payers foot the bill later as we pull gravel from further a field.

Moree town takes its drinking and general use water from the aquifers. Any depletion or contamination would be disastrous.

The Hot Artesian Spa Baths are a major tourist attraction for Moree. Depletion, reduced pressure or contamination of the aquifers would be disastrous for Moree.

Longer term (as CSG is only about 25 years long as per the companies own admission at the local forum recently held in Moree), agriculture is Moree's lifeblood. Hence it must not be put at risk. Other related matters

There is very little independent research done into the environmental effects and cost benefit longer of CSG mining on the towns. It is all done by the mining companies whose data should be treated with trepidation. The community needs independent research and data.

There is a major lack of government funded in departments to do studies needed and there is a lack of expertise in these department with regards to CSG mining i.e. hydrologists, geologists, seismologists to name a few.

There is no regulation (self regulation is not acceptable) of this industry. Legislation is inadequate.

Landholders and the community at large is massively under funded and under resourced to defend themselves against these companies.

One final point is that no one should be worse off for the introduction of a new industry that has to coexist with an existing industry. **THE NSW GOVERNMENT IS RESPONSIBLE IF RURAL COMMUNITIES**

ARE WORSE OFF.

Thank you for your consideration of our issues.

Regards