Senate Standing Committee on Rural Affairs and Transport Inquiry

The Management of the Murray-Darling Basin: Impact of Mining Coal Seam Gas

AGFORCE QUEENSLAND SUBMISSION

June 2011

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1. AgForce Queensland

AgForce Queensland (AgForce) was established in 1999 and is the peak body representing thousands of Queensland beef, sheep and wool, and grains primary producers who recognise the value in having a strong voice. These broad-acre industries manage 80% of the Queensland landmass for production and most rural and regional economies are dependent on these industries directly and indirectly for their livelihood. AgForce delivers key lobbying outcomes and services for members and presents the facts about modern farming to consumers through the *Every Family Needs A Farmer* campaign.

2. Introduction

AgForce welcomes the opportunity to make a supplementary submission to the Senate Rural Affairs and Transport References Committee Inquiry into the impact of mining coal seam gas (CSG) in the Murray Darling Basin (MDB) in regional Australia. AgForce has previously made a submission on the original terms of reference that arose from the release of the Guide to the proposed Murray-Darling Basin Plan. This submission will specifically respond to the additional terms of reference referred to the Committee in relation to the impact of the mining of coal seam gas.

The development, implementation and subsequent management of CSG mining in the MDB is an important and complex task and if not managed appropriately it will have far-reaching impacts, particularly on the future sustainability and viability of rural communities in the MDB and the environment which supports them. AgForce members are facing increasing impacts and issues arising as a result of the mining of coal seam gas. Because of this, AgForce is seeking from the Queensland Government a moratorium on mining and resource development and exploration until the full ramifications are taken into account not just to the agricultural production system on that land, but also the environment in which it is situated. AgForce is also a member of the National Farmers' Federation (NFF) Mining and Coal Seam Gas Taskforce that has been established to seek resolutions on these issues at a national level.

It should be noted that AgForce is not promoting the complete ban of this industry. However we are concerned that if the mining approvals process is not undertaken thoroughly and with the provision of appropriate expertise and information on the potential impacts, particularly as they relate to groundwater resources - it will have devastating consequences for farmers and the rural communities that are directly reliant on the MDB for their livelihoods.

AgForce supports the NFF supplementary submission to this Inquiry and the AgForce submission will seek to address the terms of reference from a Queensland perspective.

3. The sustainability of water aquifers and future water licensing arrangements

The sustainability of water aquifers and future licensing arrangements are a major issue of contention for producers in the MDB. Farming in the Queensland MDB has a high dependence on underground water for stock and domestic supplies and the nature of the CSG mining industry means that it is a heavy user of this water in its extraction and processing stages. The Queensland State Government has admitted that "*the extraction of CSG to support an LNG industry may also have impacts on the State's groundwater resources*". Understandably, the agricultural industry that is reliant on these resources are concerned about these possible impacts, particularly given that the majority of area currently under development for CSG lies within the Great Artesian Basin (GAB). Approximately, 2,700 artesian bores and 15,000 sub-artesian bores in the GAB provide vital water to rural regions for stock and domestic, urban, industrial and agricultural use – often where there is no alternative water supply source. In addition the GAB sustains numerous springs which support natural ecosystems of a diverse range of flora and fauna[1].

The concentration of CSG activities in the MDB will have a cumulative effect on surface and groundwater systems. With over 40,000 petroleum wells planned for the Surat Basin alone over the next 3 to 5 years this issue is of vital importance. It should be noted that the CSG industry is currently in a predominately explorative phase, thus cumulative impact of full CSG production water aquifers in the MDB is still largely unknown.

This is despite the National Water Commission issuing a formal coal seam gas and water position paper in December 2010, highlighting the need for appropriate, adaptive and precautionary management of CSG developments in the MDB[2]. Yet, a high level of uncertainty surrounding the potential cumulative impacts of CSG development remains.

The NWC position paper highlighted potential risks to sustainable water management that should be taken into full consideration in the management of CSG mining in the MDB. For example the impacts to other water users in the MDB from a dramatic depressurisation of the coal seam, dewatering of aquifers, and cross-contamination between aquifers affecting water quality with a flow on affect to all producers in the Basin[3].

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[1] Queensland Government, "Blueprint for Queensland's Lng Industry," (Brisbane: Department of Employment, Economic Development and Innovation, 2009). Page 5

[2] National Water Commission, "Coal Seam Gas and Water - Position Statement," http://www.nwc.gov.au/resources/documents/Coal_Seam_Gas.pdf.

[3] Ibid.

Added to this is the issue of water harvesting licences and the need for the CSG mining industry to be considered as another consumptive user of water. Lower water harvesting entitlements for producers under the proposed MDB Plan will substantially reduce the level of irrigated agriculture in the region and could result in significant declines in productive earning capacity of farms.

4. The property rights and values of landholders

With over 86% of the available landscape of Queensland now covered by a mining and resource tenure of some kind, the issue of landscape competition and property rights and values of landholders has never been more pressing for Queensland agriculture. The rapid expansion of CSG mining and exploration means that more and more landholders are required to deal with a complex range of legislation and regulations for the first time.

There has been a great deal of confusion for private property owners over access rules and exploration tenures. Evidence suggests a negotiation between landholders and exploration companies is not always a smooth process. There are also indications that CSG mining is causing an impact on long-term property values and an apparent buyer-resistance to rural properties due to resource company presence on the landscape.

In addition, negotiation and compensation processes are far from the transparent. A consistent and appropriate process is required to ensure landholders and producers' normal farming operations are not impeded by CSG exploration and mining.

Environmental Application Process

Landholders are constantly frustrated by the uncertainty of a gas company's plans and their ability to comment on those plans before government approval is given. This is particularly an issue in relation to the Environmental Application/Environmental Management Plan (EA/EMP) process. In Queensland, there is a very limited public notification and short public submission timeframe to these processes. A minimum public notification period is 8 days, and within this timeframe a landholder or other concerned party is often required to go through in excess of 1,000 pages of information in order for them to lodge an informed submission. In addition to this process landholders are not notified personally of applications that would impact them, instead a notice goes in the local paper resulting in a high research burden on producers.

Negotiation Process

Once an EA is granted, the resource operator is generally required to produce a number of additional documents, including the operational plan, which details how the development will

roll out. Often gas companies are not forthcoming in producing these documents and as a result landholders are left in the dark when negotiating their Conduct and Compensation Agreements (CCAs).

The disclosure of information by resource companies when initial negotiations are undertaken is a major issue for landholders in understanding the potential impacts a mining tenure will have on their property, business and livelihood. Anecdotal information from AgForce members suggests that not all information is given to landholders in regards to the 5-10 year production plan on their properties. It has been stated that in initial negotiation meetings maps produced by the resource operator cover the exploration phase only. However, during subsequent meetings, maps are produced that are dated prior to initial meetings that outline the full production plans. This staged approach to information sharing impacts on the property rights of landholders as they are often signing up to legally binding CCAs without the information regarding the full scope of the resource companies planned activities being provided to them. This issue impacts on a landholders property planning capabilities as they are unable to develop longer term plans due to the resource companies' failure to provide the long term production plans of their tenure. This also impacts on other parties that are associated with the landholders (banks, insurance, share farming, long-term leases). For example, insurers and banks are often requesting information of the landholder that is unknown to them, particularly during the periods between exploration and production.

Another common issue for property owners negotiating with resource companies is the inconsistent information and different liaison officers employed at various times throughout the process. Mapping often fails to depict associated infrastructure such as power lines, access tracks and ongoing maintenance.

There is also ongoing concern over the pressure that is being brought to bear on landholders to sign agreements to allow access to their property. Resource company conduct during the mediation process is also a concern, with many landholders reportedly not being advised they have the right to take a lawyer with them. This is something that can only be agreed by all parties and without the support of a trained advisor the landholder is being put at a huge disadvantage in these negotiations, particularly with the representative from the gas company having received specialised training.

Further, if an agreement is not reached at mediation, the gas company has the right to take the landholder to Land Court to decide on compensation. Whilst at Land Court the gas company can issue the landholder with a Notice to Conduct Advance Activities and come onto the

property despite the unresolved process. These types of provisions can make the landholder feel powerless about their ability to manage the decisions in this process.

While some gas companies will compensate a landholder for the time spent in relation to any CSG activity, others do not. Regardless, the reality is that the negotiation process an enormous amount of time on behalf of a landholder who has a mining tenure/s over their property.

With the divergent range of negotiations taking place according to the particular CSG company, at best landholders must undertake to include a lot of provisions in their CCAs – a difficult task in and of itself given the range of known and unknown impacts they are facing and their ability to forecast how this will impact on their normal operations.

Diminution of land value

Properties are also a form of superannuation for many landholders who are planning on selling their properties to retire. The uncertainty created about their long term future and the impact that CSG activities will have on the environment (e.g. groundwater resources), impacts on the value of these properties in the longer term.

The Queensland *Petroleum and Gas (Production and Safety) Act 2004* stipulates that a gas company must compensate a landholder for the diminution in the value of their land. However, currently gas companies in Queensland are taking this requirement to mean the diminution in the value of the land for the actual physical footprint of activities being undertaken on the property. It is not being taken to include the loss in the value of the land as a whole because of the activity on the property. This is despite multiple reports from valuers and real estate agents in the Surat Basin stating that the presence of CSG has affected the sale of properties. With the current reality in Queensland of a resource industry at only 1/10th of their production estimates these effects are likely to be compounded over the next decade. Landholders in the Surat Basin who have a proposed CSG development on their property now feel they are not even in the position to sell due to lack of buyer interest.

The only way to guarantee the value of the property is by negotiating a strong CCA with the gas company. The CCA attaches to the land for the length of the term of the agreement. However to do this, the landholder needs appropriate access to all the company information and proposed plans, as well as a good lawyer, valuer, accountant and time.

Food security

The exponential increase of coal seam gas mining in the Queensland MDB, now also encroaching into areas of Good Quality Agricultural Land and closely settled rural areas, has left

many people adversely affected by mining related externalities, often without appropriate compensation or benefits. The increase in the mining footprint in these areas, also threatens the nation's food production capabilities. This is exemplified by the recent contentious mining applications in the Felton Valley and Liverpool Plains, both situated in the Murray Darling Basin.

Additionally, almost 140,000 hectares in Queensland is already owned by four major coal seam gas companies. This land reportedly includes high quality cropping land and grazing properties that have been bought for strategic reasons or major infrastructure projects. Two of these companies, Arrow Energy (Shell) and Queensland Gas (BG Group) are foreign owned. It is also likely that some of these farms will now be used for water and storage precluding future agricultural use[4]. This raises the question of the future ownership of Queensland rural properties once the gas boom is finished. There is a real issue of future food security post the 40-50 year timeframe of these CSG operations, which is compounded by these properties being managed by miners rather than producers. While the Queensland Strategic Cropping Land legislation aims to protect some vital parts of this landscape, it does not cover projects already underway nor do the levels of protection go far enough to ensure the future prevalence of farming enterprises in the Surat Basin.

5. The sustainability of prime agricultural land and Australia's food task

Queensland farmers generate $14 billion per annum in production, and with one in eight jobs in the Queensland workforce either partially or entirely supported by the agricultural supply chain, it is a critical area of employment and growth for Queensland, particularly in regional areas.

The importance of the MDB to Australia should not be underestimated, it represents 18% of total grazing land and the availability of water combined with favourable growing conditions allows the MDB to account for 32% of Australia's dairy cattle and 45% of Australia's sheep and lambs. Around 3 million tonnes of feed are used for beef cattle, equivalent to approximately 26% of livestock feed production in Australia. Cereal grain grown under irrigation is reported to be 260,000 hectares, which represents 20% of irrigated land use in Australia, and the most significant irrigation areas for production are located in the MDB. In addition, the availability of

[4] John McCarthy, "Coal Seam Gas Miners Buy up 140,000 Hectares of Prime Queensland Farmland," *Courier Mail*, July 4 2011.

feed-grain crops, water and close proximity to some major markets allows the MDB to account for 35% of Australia's livestock farming[5].

Cumulative Impacts

Agricultural land in Queensland is being consumed by the resources sector at an unprecedented rate with a permanent reduction in the agricultural capacity. No mine site has ever been able to rehabilitate good quality agricultural soil to its former productive state. Most mines remove the topsoil and stockpile it for rehabilitation - however this stockpiling changes the soil structure, texture and nutrient availability. Thus mining that disturbs areas of prime agricultural land could mean good soil and productive farming land is lost forever, resulting in substantial problems for graziers and local communities that are still ongoing.

The risk of a similar event occurring in the MDB would be catastrophic in terms of environmental impacts as well as impinging on the ability of primary producers' to run their business. Effects would also be compounded as a result of the Basin's already well-documented problems with salinity.

Environmental impacts

The cumulative impacts on environmental values and landscape function can also be seen through the effects on:

- Native vegetation coverage, ecosystem linkages, ecological processes and biodiversity condition;
- Riverine, floodplain and wetland assets and function;
- Land and soil assets;
- Increased incidences of pest and weeds; and
- Chemical residues in food.

Salinity

The State Government estimates that in the Surat Basin alone there is an expected annual production rate of 25 Gigalitres (GL) of Coal Seam Gas (CSG) water. This will generate 62,500 tonnes of salt per annum amounting to 1.8 million tonnes over 30 years. Waste (or associated) water that has high salt content has the potential to leak or be left behind and damage farming land, creeks, rivers and wetlands.

A recent State Government audit report found CSG well leakages, as well as the need for resurveying a number of wells after it was revealed some company's methods were

[5] ABS, Experimental Estimates of the Gross Value of Irrigated Agricultural Production, 2000–01 to 2006–07
ABS, Water and the Murray-Darling Basin - A Statistical Profile, 2000-01 to 2005-06

inconsistent with those employed by the rest of the industry. The results of the Coal Seam Gas Well Head Safety Program Audit found 34 leaks across 2719 wells inspected throughout Queensland. Of those leakages, the report found that 5 well sites inspected were a recognised flammable risk (called a 'class one' leak). The highest detection was 21 percent gas in the air. The report also found that one company's methodology for well inspection was not in accordance with the new industry-wide code of practice. With so many companies vying for dominance in the landscape, and this industry at a fraction of its full production levels the early prevalence of such issues is concerning[6].

6. Other related matters including health impacts

There are also significant health impacts as a result of the rapid incursion of the CSG industry in the MDB. The health impacts are significant and should not be underestimated, including added stress on personal relationships, time taken away from running businesses (which is not always compensated for), as well as the difficulties faced with succession planning and the impact on the saleability of properties under CSG tenure. The stress of the unknown impacts, including the mental health issues arising as a result of the seemingly David and Goliath type battle is prevalent in the Surat Basin.

Impacts as a result of diminution of land value and the negative impacts on lifestyle resulting from factors such as:

- Loss of visual amenity;
- Mental and physical health of landholders close to the site and the associated strain on rural families;
- Devaluation of properties;
- Health and safety risks;
- Loss of productive farming land and associated revenue;
- Impacts of construction noise, dust, light and increased traffic movements;
- Loss of generational farming communities; and
- Loss of water supply.

7. Conclusion

AgForce maintains that a balance between food production, CSG mining, community and environmental needs is achievable. This is not about mining versus production but about optimising the triple bottom line, balancing the economic, social and environmental needs of the Murray Darling Basin.

[6] Queensland Government, "Coal Seam Gas Well Head Safety Program," ed. Economic Development and Innovation Department of Employment (April 2011).

There are many positives for regional communities when resource-rich deposits are discovered and developed, but it is AgForce's responsibility to balance that with policy discussions and decisions that are in the best interests of agriculture and food production now and into the future.

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