Submission No 26

INQUIRY INTO COAL SEAM GAS

Name: Mr Richard Deem

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New South Parliament

Coal Seam Gas Inquiry

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Table of Contents

1. Introduction

My wife and I are a retired couple living on an 8.8 hectare property at Cougal north of Kyogle on or adjacent to the route of the Lions Way Gas Pipeline proposed by Metgasco to commence in 2012. I can't say with certainty if our property is affected or not because the Pipeline route appears to be a little uncertain, presumably because of opposition from land holders along the way.

My main concern is that the route the proposed pipeline development would take is inappropriate for a variety of reasons largely related to the potential damage and disruption it would cause in a very special area.

2. The Lions Way Gas Pipeline Proposed by Metgasco

This pipeline would extend 145 kilometers from gas fields at Casino in northern New South Wales to power the old Swanbank power station near Ipswich in Queensland and link with the national gas transmission grid through a connection to the Roma Brisbane pipeline. It would pass through the township of Kyogle, through cropping and grazing land in the Richmond River valley and Lynchs and Gradys Creek valleys in NSW. It would then pass under and along several kilometres of the Lions Road through the Border Ranges World Heritage area and down through the Running Creek Valley in the Scenic Rim district of Queensland, through a planned Bromelton Industrial Estate west of Beaudesert and lastly through the Logan River valley to Ipswich.

The Lions Road section is located in land slip country and because of our high rainfall, the road has been cut for lengthy periods due to land slippage and trees falling across the road. Clearly to trench along the length of the road in this steep country would introduce further ongoing slippage problems.

According to Metgasco's Project Description Report, the road would be significantly disrupted for many months as the pipeline would be placed in a trench located directly under the road.

The road is narrow and has many sharp turns. There are numerous culverts under these bends which convey water downhill along wet gullies. It would not be possible for a gas pipeline to be laid under the road in these areas without being routed off the narrow gazetted road reserve and into World Heritage National Park.

Undesirable environmental effects within this World Heritage Area would not be confined to the construction phase but also in the operational phase depending on where compressors which move the gas along the pipeline are located and what inspection and maintenance regimes are implemented.

The idea of putting a gas pipeline through a world heritage listed national park despite all of Metgasco's assurances is repugnant.

A major concern with this pipeline development is that Metgasco is not required to fully specify any intentions it may have to extend operations over time by subsequently drilling and extending connecting wells anywhere along the route of the pipeline with attendant 30 meter wide road reservations, gas and water pipelines and pumping stations. This has typically been the strategy of miners in other countries and in Queensland.

One of the stated objectives in the company's Preliminary Environmental Assessment Report for the pipeline is that the project will "encourage development of further gas fields in NSW".

Accordingly, initial approval for the pipeline does not describe or possibly even contemplate what may ultimately become an industrial wasteland in private properties along the route. This may be accomplished by stealth, against the owners' wishes and without payment of what the owners might consider to be adequate compensation if they had full knowledge of all of the pollution and other issues raised in this submission.

There are numerous cases of gas well proliferation occurring in Queensland with chaotic outcomes.
http://news.smh.com.au/breaking-news-national/police-dismantle-tara-blockade-20110404-1cyld.html

Replication of this type of industrial development process in our fertile river and creek valleys and pristine and environmentally significant World Heritage listed Border Ranges region is abhorrent.

The adverse impacts of poorly regulated mining and distribution of coal seam gas projects are well documented both overseas and in Australia but so far these impacts do not yet appear to be allocated sufficient weight to stimulate government resolve to address them effectively. The fact that substantial, widely-based public opposition to coal seam gas mining has been easily mobilised throughout Australia testifies to the legitimacy of concerns.

Some of the concerns associated with the industry are:

3. Health Impacts

The National Toxics network produced a report in July 2011 outlining the risks (some of which are detailed below) to health, communities, environment and climate resulting from hydraulic fracturing in coal seam gas mining. This report is one of many studies conducted in the area.

http://ntn.org.au/wp-content/uploads/2011/07/NTN-CSG-Report-July-2011.pdf

David Shearman, Emeritus Professor of Medicine at the University of Adelaide has said in relation to coal seam gas mining that:

"There should be no half measures with human health; we should have learned this from the asbestos disaster" and

""The implications for agriculture and food production must be considered and we must ask, "what if we are sacrificing a sustainable source of food for a short term financial gain in a world moving rapidly to food shortage?" US experience suggests that we are"".

http://theconversation.edu.au/coal-seam-gas-could-be-a-fracking-disaster-for-our-health-1493

i) Water Pollution

Coal seam gas mining generally requires the removal and disposal of large quantities of water which has been polluted with salt and/or toxic fracking chemicals or with BTEX chemicals released from within the coal seams by the extraction process.

There also seems to be no fail-safe way to ensure that aquifers do not become polluted as a result of drilling through or near them.

According to the Australian National Water Commission:

"Current projections indicate the Australian CSG industry could extract in the order of 7,500 gigalitres of co-produced water from groundwater systems over the next 25 years, equivalent to approximately 300 gigalitres per year. In comparison, the current ***total*** *extraction from the Great Artesian Basin is approximately 540 gigalitres per year".*

http://www.nwc.gov.au/www/html/2959-coal-seam-gas.asp?intSiteID=1

In the above report, the Commission outlines the following risks to sustainable water management from coal seam gas mining:

- Detrimental impacts on other water users and the environment
- Significant impacts on water quality and river and wetland health
- Connection and cross-contamination between aquifers with impacts on ground water quality
- Significant social impacts by disrupting current land use practices and the local environment

The Queensland government estimates that 630,000 – 1,728,000 tonnes of salt will be extracted from Queensland coal seam gas mines per year. There already have been problems with illegally dumped polluted water in Queensland. What happens to the pollution slurry that remains when water is evaporated in large dams? What happens if flooding overwhelms these ponds or if they fail to hold the liquid for other reasons such as a breach of the plastic dam lining?

The coal seam miners are able to operate with relative impunity because legal liability is difficult to establish (although class actions have now been commenced against BHP Billiton in Arkansas for poisoning their water sources and polluting the soil and air)
http://www.theage.com.au/business/class-actions-shake-bhp-20110524-1f2gk.html

When water pollution becomes evident, the companies deny liability and there are serious difficulties in identifying a direct causal link between company's activities and the pollution. In addition, the mining companies that caused the problem may no longer exist or may have

insufficient resources to make good the damage or more importantly, in all probability it is not possible to rectify the damage (including damage to the environment and wildlife).

Coal seam gas mining and distribution has crucial health and water security implications for food producing and residential drinking water users and for the environment in general.

ii) Air Pollution

Typical noxious gas releases from gas wells and compressor stations include BTEX (benzene, toluene, ethyl benzene and xylene), volatile organic compounds, and poly-aromatic hydrocarbons all of which affect the respiratory system (my wife has asthma), 25% are carcinogenic, 37% affect the endocrine system, 52% affect the nervous system and 40% affect the immune system. In addition to the flaring releases at the well heads and at compressor stations along a pipeline, additional releases derive from numerous truck movements conveying chemicals, equipment and personnel, stirring up dust and emitting exhaust fumes.

iii) Noise Pollution

Not only is there drilling and other noise at well heads and along the access roads, compressors along the pipeline operate continuously throughout the day and night to move the gas through the pipeline. These can be heard at a distance of at least a kilometre during the day (further at night) presenting significant noise pollution. Metgasco has not disclosed how many compressors will be required along the pipeline and where they would be located. Properties adjacent to gas field properties and pipeline compressors also experience this incessant noise. Trucks are also used to remove gas from wells not connected to pipelines.

iv) Visual Pollution

The visual pollution results from the location of an industrial gas field on properties with high fenced areas containing well heads, compressors and other equipment. There are also roads, water and gas pipeline reservations that connect wells cleared to 30 meters wide. The flaring of methane gas also illuminates the landscape all night.

4. Alienation of Land

Scarce food producing land is alienated by the coal seam gas mining process through salt and other contamination and the proliferation of wells and pipelines which in our area would impede the ability of farmers to work their creek flats.

Peter Dart, Associate Professor, Agriculture and Food Sciences at the University of Queensland said on May 26th 2011:

"Australia is a major exporter of grain, shipping out enough to feed around 60 million people. Much production occurs on land that is also good for CSG extraction".

"Some of the best cropping lands in Australia and the livelihoods of some of the best farmers in the world and their considerable food production are at stake: surely, the precautionary principle should apply here".

"CSG wells take up about two hectares of land, and require access roads and underground pipes for the gas collection alongside them" (More than 30,000 CSG wells are planned).

"The CSG industry will not last much beyond the next 30-40 years, and the world's food supply needs to extend much longer than this".

http://theconversation.edu.au/coal-seam-gas-a-risk-to-food-security-485

Land clearing for roads and 30 meter wide pipeline reservations for water and gas pipes also fragments wildlife habitat and disrupts riparian areas. Such activity would not be permitted of farmers.

5. Legal Rights to Quiet Enjoyment of Land

Landowners cannot legally refuse entry to miners or prevent mining activities. Nor can they prevent the proliferation of wells and associated structures and equipment, roads and accompanying pollution on their land. It is acknowledged that the Crown reserves that part of the land required for minerals below the surface which is transferred to miners but their operating techniques can effectively obliterate the owner's use and enjoyment of the surface area in a way that is not reflected in standard compensation arrangements and cannot be morally justified.

6. Land Values

Properties located near or along an existing or intended gas pipeline have become virtually unsaleable or they may be sold only at a substantial price reduction because of the issues mentioned in this submission.

Typical compensation arrangements, secured under conditions of unequal bargaining power, have not addressed the ultimate reality of coal seam gas mining and distribution impacts, including effects on real estate values and marketability.

The Queensland Department of Environment and Resource Management, which is responsible for land valuations, has adopted benchmark reductions in unimproved capital value of up to 20% where a whole grazing / cropping property is affected by CSG development.

http://www.nswfarmers.org.au/__data/assets/pdf_file/0005/66407/Houen_Paper.pdf

Banks are already refusing business loans to owners of properties near to gas fields.

7. Suggested Remedies

George Houen of Landholder Services Pty Ltd has provided a number of suggestions that might take the debate forward although they do not represent a complete answer to the problems of coal seam gas mining.

http://www.nswfarmers.org.au/__data/assets/pdf_file/0005/66407/Houen_Paper.pdf

i) Water

- All associated water must be immediately re-injected within its aquifer of origin unless required for immediate beneficial use, regardless of cost.
- Associated water may only be stored in water tanks, or where that is impracticable, due to volume, in double lined (polythene and clay) dams.
- Accumulated salt must only be disposed of in purpose built, permanently secure storage (a public waste facility or one on land owned by the CSG operator) or else in the ocean.
- Fraccing of wells should not be permitted other than in circumstances where the risk of contaminating groundwater or causing aquifer leak is minimal.

- CSG operators must make available and pay for independent baseline assessment and monitoring services for private bores located in or in proximity to gas tenements.
- Legislation must guarantee enforceable make-good protection for owners in the event that water resources are damaged by CSG operations.

ii) Land

- Disturbance and loss of land productivity must be minimised by reducing the number of vertical wells by methods including the use of lateral drilling.
- Vertical wells must be placed where they cause the least possible disturbance to land use.
- Good quality cropping or grazing land must only be tapped for gas extraction by lateral drilling, feeding to vertical wells located only on margins, headlands, access tracks etc.
- Gas and water pipelines (both gathering and export) must be routed along road corridors where possible, and within properties along the route causing the least disturbance, regardless of cost.

iii) Compensation

- Legislation to provide that if CSG operations affect the use of a property, the owner may apply to the court to have the property compulsorily transferred to the CSG operator at market value plus a court determined amount for disturbance.
- Legislation to provide that whenever a CSG Operator proposes initial activities on a property, the operator must give the landowner full disclosure of the planned or potential CSG development on that land.

8. Summary

The way the coal seam gas industry has been allowed to operate and proliferate, both in other countries and locally is not consistent with the standards of behaviour generally expected by the community of Australian governments and businesses.

Broad Australian expectations are that the excesses of unbridled business power should be regulated for the benefit of Australians in general but not at the expense of individual constituents who happen to be targeted by coal seam gas operators.

The industry is not effectively regulated as evidenced by the many privately detected instances of water contamination, well leaks and illegal waste water disposal. The way through this issue is for the regulators to insist upon an utterly open process with full and meaningful participation of representatives of all interested parties and no moving forward without full consensus.

This includes the revision of the regulatory framework so that it does not arbitrarily limit the regulators' willingness or ability to deal with such crucial issues as water quality and other environmental issues and does not effectively leave the implementation of controls to the mining companies.

In this way we are more likely to make decisions that our grand children's grandchildren can look back upon with approval.

While we make efforts to try to fix a broken system, we should not lose sight of the overarching reality that:

"Coal seam gas is a disaster for Australia. It is not an industry we should be beginning at a time when we need to be getting away from investment in fossil fuels"

- Senator Christine Milne http://www.abc.net.au/unleashed