

**Submission
No 212**

INQUIRY INTO COAL SEAM GAS

Name: Mr Tony Todman

Date received: 4/09/2011

Inquiry into Coal Gas

The Terms of Reference sets out 5 headings, with 18 sub headings, all vitally important items and only 4 1/2 weeks to respond.

Currently there are a number enquiries being undertaken and to name a few, along with their time frame and items to be addressed:

Lifetime care support - 7 weeks - 4 items

Rail Infrastructure Project Costings - 6 1/2 weeks - 5 items

Economic & Social development of Central Western NSW - 8 weeks - 7 items

Kooragang Island - Orica leak - 10 weeks.

Surely if the Government is serious about the problems with coal and coal seam gas exploration and mining it would allocate more time for a thorough enquiry.

Be that as it may, everybody should take a deep breath, wait until all the enquiries that are being undertaken around Australia are in regarding the exploration and mining of coal and coal seam gas, analysis the findings then sit down and establish the safe way forward for all concerned. A way that establishes zero harm to land and water and the protection of prime agriculture land for future generations.

Remember, 'a politician looks to the next election, a statesman to the next generation'. Let's see if we can find some statesmen to implement regulations to protect future generations of Australian's.

In the meantime it may be worth considering the comment made by Tony Burke, Environment and Water Minister on Lateline following a questioned posed to him by Ali Moore 'As you say, these are Commonwealth standards, higher than State standards. Given the issues here and the potential risks, is there an argument for the Commonwealth to have a greater say for a nationally co-ordinated approach? Response by Tony Burke was 'I don't think we want to have a situation where you end up with different standards depending on what jurisdiction you're in. We've done the first part of that, which is to say to the states we want there to be uniformity about this and we're now awaiting a response from the states.

From industry's perspective, they want the same rules no matter where they go, and from the community's perspective, the water table is a critical risk factor in this. And you want to have the correct conditions in place that make sure we're not taking a risk with groundwater.

That's why a couple of weekends ago you may have seen Martin Ferguson, the Resources Minister, called for the states to adopt the same water restrictions that we've put in place. That's the easiest way to do it'.

<http://www.abc.net.au/lateline/content/2011/s3305181.htm>

RECOMMENDATION: WE NEED UNIFORM RULES AND REGULATIONS THROUGHOUT AUSTRALIA.

Tony Burke, went onto make some very valid comments, 'every single aquifer exposed to coal seam gas mining must be tested to ensure groundwater is not put at risk'. He further said 'for the ones that have come to me, we've made sure that we've got the scientific oversight happening and that we're testing one aquifer at a time to make sure that as these projects go ahead, we're constantly monitoring and making sure we don't get detrimental impacts on the environment'.

RECOMMENDATION: THE STATE GOVERNMENT SHOULD UNDERTAKE THE ABOVE PLUS THE CUMULATIVE EFFECT INTO CONSIDERATION WITH ANY APPROVAL.

There was a recent very good article covering the issues of coal and coal seam gas undertaken by Clancy Yeates in the Sydney Morning Herald.

<http://www.smh.com.au/business/we-can-no-longer-afford-growth-at-any-cost-20110821-1j4mj.html>

Also three of Australia's top water scientists have told Lateline more research on the safety and environmental impact of coal seam gas mining is urgently needed.
<http://www.abc.net.au/lateline/content/2011/s3305176.htm>

If the above is taken into consideration then it should address most of the items in the Terms of Reference, however a couple of extra comments that should be taken into consideration.

Coal Seam Gas - Approximately 25% of NSW is currently covered by coal seam gas exploration licences.

Water Impacts: Quantity - Coal Seam Gas is trapped within the coal seam by water pressure. In order to access the gas water must be extracted from the coal seam to allow the gas to flow. This can be a large amount of water.

Water Impacts: Quality - The water that comes up from the coal seam is often saline and contains naturally occurring chemicals from within the coal seam.

Health Impacts - Doctors for the Environment Australia made a detailed submission to the Federal Parliamentary Inquiry relating to coal seam gas impacts in the Murray Darling Basin. The submission covers a range of health concerns relating to coal seam gas development.

Fracking Impacts - Hydraulic fracturing or 'fracking' risks contamination of fresh water aquifers. Fracking forces a mix of water, sand and chemical into the CSG well at high pressure to fracture the surrounding coal in order to improve gas flow rates. It also has the potential to create fractures outside of the seam and can link the well with fresh water aquifers. This potentially exposes fresh water aquifers to fracking chemicals and other contamination existing within the coal seam.

- Fracking has been banned in France, is currently suspended in areas of the UK, is suspended pending review in Quebec, Canada and has strict conditions in the New York state in the US including a ban within primary aquifers and within the drinking water catchment.

- A recent report showed fracking near water bores increased methane levels in those bores to potentially explosive levels.

Surface Impacts - The surface impact from CSG relate primarily to the quantity of infrastructure required to connect wells with pipelines and roads, water management facilities, processing facilities, compressor stations, and transmission pipelines to power stations and export terminals. Depending on the environment, the impact on the surface can undermine the agricultural potential of an area or significantly disrupt the environmental values of bushland.

- A report in June 2011 led to the exploration activities of Eastern Star Gas being investigated by the Federal Environment Minister for potential breaches of Federal Environment laws due to the extent of clearing within the Pilliga Forest

Greenhouse Gas Emissions - Claims by industry of CSG being a clean, low emission technology are not supported by science. Very little research has been done, but what has points to CSG as having little if any greenhouse gas benefit over coal fired power.

- Methane is 20 times more greenhouse potent than Co2 over a 100 year timescale which pushes up its carbon equivalent footprint. It is even worse if it is turned to LNG for export because a significant portion, estimated at around 10% of the gas is used in the refrigeration process to liquefy the gas.

Royalties- Putting aside royalty holiday and rates, maybe the Commonwealth should look to setting a rate and distributing to the states and therefore eliminate the competition between states to be the biggest producer of royalties. Western Australia wants mining and has the current resources for it, so let them have it.

Social Implications - Under NSW law the Government owns and controls mineral and gas resources under the ground. There are laws pertaining to the granting of rights to explore for and exploit those resources that give mining companies the right to force access to private land. These rights are creating tremendous anxiety and frustration in many communities, particularly in agricultural land. The issues include:

- Creating division within communities with individual landholders being able to grant access without reference to the neighbours or communities wishes. This has created some conflict between members of communities

- Impacting on land values – I can see the potential for a future class action against the State for those lands outside the buffer zone, where the value has reduced because it being unsalable and the banks foreclosing because the debt/ratio has reduced and the landholder can't refinance..

- Creating uncertainty where land is covered by exploration licenses which can remain under licence for years without any idea of what the plans are for exploration or development.

Food Security - Large areas of productive agricultural land in NSW are covered by existing petroleum exploration licence. There are growing arguments that these areas should be protected for growing food and because of the water and surface impacts of coal seam gas development it is a risk to the future agricultural potential of these areas to allow CSG.

The areas at risk include more than just the most productive agricultural land like the Liverpool and Moree Plains. The Sydney Basin and Hawkesbury areas also produce large amounts of food for local consumption and there are important horticultural areas in the Southern Highlands, Central West and Mid North Coast and North Coast of NSW. This all need to be protected to ensure future food security

WHATS BELOW THE GROUND IS NOT GOING AWAY, THEREFORE NO RUSH TO EXTRACT IT, SO LETS GET IT RIGHT.

WORLD FOOD SECURITY IS CRITICAL FOR THE SURVIVAL OF FUTURE GENERATIONS. SO LETS GET IT RIGHT.