

Submission to the State Governments Inquiry into Unconventional Gas Mining

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My name is Bernadette Tapscott and I live in South West Victoria in Bolwarra on 10 acres, Bolwarra is on the outskirts of Portland. I am 100% against unconventional gas mining not only in our area where there is currently a PEP 150 licence, but against it anywhere in Victoria.

I have worked as a Primary school teacher and my husband as a truck driver and currently a stevedore for the past 33 years. We own our property and currently support our youngest child who is in tertiary education. Along with my husband we have raised our three children in this rural environment because we value the life style a smaller community provided. Such an environment has provided us with the luxury of close relationships with not only friends but the wider community through business both in our work and as consumers, education as our children passed through the primary and secondary schools, sporting and interest clubs that either we or our children participated in or followed because of interest or association with others, we have all been active members of voluntary community organisations such as the CFA, Pony Club, Gymnastics, Neighbourhood House and many other groups. In a smaller community there exists the amazing opportunity to be actively involved in how the community grows, develops and changes. In our rural setting you are able to have personal contact with the councillors of the Glenelg Shire Council because it is made up of members of our wider community who have a passion for the past, present and future of the Shire we live in and from my experiences they make themselves readily available to the community members they represent.

Fourteen months ago I became aware of CSG and Unconventional Gas Mining at a community event that was arranged by local people. From that meeting I went on to research what was occurring in Queensland and was concerned enough that I joined the local group Gasfield Free Glenelg to actively make the wider community aware of the industry and the potential impact it had on our local area and Victoria. Along with other members I am currently conducting surveys within the Glenelg Shire so that we have statistics supporting the communities belief that there is no social licence for this industry to operate in our area and that indeed we wish to see a total ban of all forms of unconventional gas mining in Victoria.

I wish to present the following submission to the State Governments Inquiry into Unconventional Gas Mining as I believe there is a compelling case to place an outright and permanent ban on all on shore unconventional gas drilling in Victoria.

Regarding the Terms of Reference:

1. The prospectively of Victoria's geology for commercial sources of onshore unconventional gas;

Our region is largely made up of dairy and beef farms, orchards, potato growing, viticulture, organic food farms, as well as other smaller food producing enterprises. All of these rely on our

water table and clean air. We have experienced the impact that Blue Gum plantations have had on the water table. Another industry that requires enormous amounts of water to be drawn from the Dilwyn Aquifer is not a viable option for the Glenelg Shire. I have not seen acceptable evidence that the Unconventional Gas Industry is able to adequately recycle the contaminated water from their operations. It also concerns me that the industry does not pay for the water they draw from water tables, however rate payers and other industries do.

In the Weekly Times on June 24th 2015 it was reported that the Victorian Farmers Federation have a current policy for the existing moratorium to be maintained until 2018 when there is a state election. VFF land management chairman Gerald Leach stated “We have firmly prosecuted that farmers should have the right to veto over mining activities on their land.”

Victoria is essentially an agricultural state and considering the short term minimal royalty returns that state would receive from the UCG industry the risk to Victoria’s geology that supports sustainable food production is far too high.

2. The environmental, land productivity and public health risks, risk mitigations and residual mitigations and residual risks of onshore unconventional gas activities;

a) Environmental

Water: Here I draw from evidence that I have viewed from Queensland where the industry has been established for example in Tara and Chinchilla. There is evidence from documentaries I have viewed on the ABC of contamination of the Condamine River. In 2011 water tested from the river was found to contain ten times the safe level of boron and cadmium and more than 100 times the safe level of silver, chlorine and copper. In May 2012 methane was found bubbling along a 15km stretch of this river. In the Pilgr Forest near Narrabri in NSW, testing confirmed the presence of numerous substances at harmful levels including ammonia, lithium, cyanide, bromide and boron. These chemicals are dangerous by products of CSG mining and were not present in sites tested upstream. The quantity of water that companies will draw from aquifers alone for their drilling is a major concern. The Federal Government “Water Group” estimates 5400GL of water could be used in extraction each year, almost three times the 1872GL used by all households in Australia each year combined. In a country prone to drought this alone is a direct threat to the nation’s water supply. I am lead to believe that the companies indeed do not pay for the water they use which astounds me considering the regulations applied to households, communities and industry regarding our precious resource “WATER”.

I attended a community meeting in Portland on the 9th of October 2014 where Senator Larissa Waters shared Queensland’s experiences with the mining industry. Larissa said “There is a real risk to long-term water supplies and there is no long-term solution if an aquifer is compromised”.

An article by Kate Dowler in the Weekly Times on May 21st 2014 reported that a letter in the Medical Journal of Australia discusses contamination of Aquifers in USA and Australia due to CSG production. Monash University associate professor Marion Carey and two UNSW colleagues outline “real concerns” following a recent incident in NSW where elevated levels of heavy metals and uranium were found in groundwater next to a holding pond for water produced by a CSG operation.

Land: The aerial views I have seen of gas fields in Tara Queensland alone are evidence of the destruction of land, a web of roads connecting wells for kilometres with the lease

areas looking more like swiss cheese than an Australian landscape. I have also seen the aftermath of a holding pond near Nangwarry in SA, the Panax drilling site where mud was left in an abandoned holding pond.

What guarantees does the government make that there is an insurance process in place where by land holders and the public in relation to state and national parklands, can claim compensation for land that is not regenerated, that is damaged as a result of this industry?

Can the government provide the public with a Risk Management Plan indicating their proposed procedures should our current farming industries experience impacts in regard to their production as a result of the Mining Industry?

The impact on Victorian road systems, which are already of continued concern in every shire of the state, would be immense as there is without doubt an enormous increase in heavy vehicle traffic in the construction phase required for establishing this industry. There is substantial evidence from Queensland regarding the impact the industry has had on rural roads. In Victoria every community has issues with the conditions of roads and funding for maintenance and development are regularly being raised as issues.

Public Health: The construction phase of the industry is immense with the volume of workers invading rural towns having had negative social impacts in areas such as Dolby and Roma as reported on Landline by Caitlyn Gribbin last Saturday the 6th of July. The fact that gas wells can be placed in close proximity to homes is also of concern with people being exposed to endless noise, lights and flaring.

A document that has been produced as a result of experiences in Australia needs careful consideration, please view the following:

The Australian gas fields; personal insights into the health impacts and limitations of regulation by Dr Geralyn McCarron Bachelor of Medicine , Bachelor of Surgery, Bachelor of the Art of Obstetrics, Fellow of the Australian College of General Practitioners, Member of the National Toxics Networks, Member of Doctors for the Environment Australia 26th 2013 leaves me convinced that there are real and significant health risks to all people living in the proximity of gas wells.

New York has banned this very industry based on health impacts after expert investigation by the New York State Department of Health.

<http://www.nytimes.com/2014/12/18/nyregion/cuomo-to-ban-fracking-in-new-york-state-citing-health-risks.html?r=0>

https://www.health.ny.gov/press/reports/docs/high_volume_hydraulic_fracturing.pdf

Risk mitigations and residual mitigations and residual risks: The risk to the environment, life style, health, food production, property values and climate change are immense for Victoria if this industry is allowed to be established. Victoria is a densely populated state with many communities already expressing their views to not allow the development of gasfields by conducting surveys and declaring themselves gasfield free.

3. The coexistence of onshore unconventional gas activities with existing land and water uses including;
 - a) Agricultural production and domestic export market requirements:

Victorian farmers produces approximately \$9 billion a year through agriculture. With a 25% share of Australia's total food exports and 28% of Australia's wool and fibre exports, Victoria is Australia's largest food and fibre exporter.

[http://www.ofa.org.au/papers/Victorian%20Organic%20Sector Action%20Plan 12Dec08.pdf](http://www.ofa.org.au/papers/Victorian%20Organic%20Sector%20Action%20Plan%2012Dec08.pdf)

Agriculture production and domestic markets should not be put at risk for the short term gain of establishing unconventional gas mining. The VFF policy for the existing moratorium to be maintained until 2018 when there is a state election is evidence enough for me that farmers have no confidence that there can be coexistence of onshore unconventional gas activities with existing land and water uses.

Other evidence supporting my research can be found at:

<http://www.dpi.vic.gov.au/agriculture/about-agricultur/publications-resciurses/industry-profiles-archive/beef-industry/victorias-beef-cattle-industry-profile-summer-2012>

<http://www.dairyaustralia.com.au/Indiusrty-overview/Dairy-regions/Gippsland.aspx>

[http://www.ofa.org.au/papers/Victorian%20Organic%20Sector Action%20Plan 12Dec08.pdf](http://www.ofa.org.au/papers/Victorian%20Organic%20Sector%20Action%20Plan%2012Dec08.pdf)

b) The legal rights of property owners and the impact on property values

I am confident that this industry has caused land to be devalued and has indeed created conflict between landowners where they have been landlocked when not wanting the industry established on their properties but their neighbours have. I have seen reports on both Four corners and Landline with farmers in conflict over allowing the industry to be established. A number of farmers have profited from sales of their properties but this is often to the demise of generations of farming that is not able to co-exist with the industry, farmers who have been unable to survive server drought and have not had any other financial option. The fact that drought has driven them from their farms is another reason this industry should not be allowed. The buying power of the companies is immense and not competitive with the average Australian.

c) Implications for local and regional development, investment and jobs:

The boom and bust cycle of towns such as Roma, Dolby and Chinchilla have been made very public and cannot be ignored in the decision to allow this industry to establish. As an Australian resident I would assume that governments would protect communities from experimental mining projects. Communities across Australia heave heard of the devastation of Queensland and the United States of America.

Fly in and Fly out labour is used in establishing the gas wells and this in itself has proven to have created significant social issues with huge implications for local and regional development, investment and jobs.

As stated previously I believe our agriculture in Victoria is significantly more sustainable than this industry and would directly experience negative impacts at both regional and local levels. Victoria needs investment and employment that is sustainable, unconventional gas mining will not provide this. The mining industry in general has peaked and the cost to communities and individuals has overwhelming evidence that the fly in fly out has come at a negative cost for short term financial gain.

4. the ability of potential onshore unconventional gas resources contributing to the State's overall energy sources:

There is absolutely no denying that Unconventional and CCSG is a fossil fuel. I am of the opinion that Victoria cannot in any way support any industry that is based on Fossil Fuel production.

Renewable energy is an exciting and growing option and the only possible way for Victoria and indeed Australia to focus on. Other countries around the world have placed bans on this industry based on sound scientific research, in many cases concern for the lack of confidence in research being able to confirm safety and because they also see fossil fuels as an out dated option.

In the USA New York, California, New Jersey, Texas, Hawaii, Vermont

In the UK Wales, Northern Ireland

In Europe France, Luxembourg, Bulgaria, Spain, Switzerland, Austria, Italy

New Zealand Christchurch, Kaikoura

If all of these countries, many with much larger populations and industries than ours, can survive and plan for their futures, then so can Victoria.

5. The resource knowledge requirements and policy and regulatory safeguards that would be necessary to enable exploration and development of onshore unconventional gas resources:
- a) Further scientific work to inform the effective regulation of an onshore unconventional gas industry, including the role of industry and government, particularly in relation to rigorous monitoring and enforcement and the effectiveness of impact mitigation responses:

The following extract is from www.shale-gas.com.au the Executive Summary Page 27

“Monitoring of shale gas production and impacts is likely to be undertaken by petroleum companies as part of their normal operations, but in order to win community confidence, truly independent monitoring will need to be undertaken by government or other agencies and/or credible research bodies. Induced seismicity, aquifer contamination, landscape and ecosystem fragmentation, greenhouse and other emissions to the atmosphere, together with potentially adverse social impacts, are all likely to be areas of community concern that will need to be monitored and for which baseline surveys will be required. It will not be feasible to monitor large areas for extended periods of time and therefore monitoring will need to be carefully and cost effectively targeted to answer specific questions and transparently address particular concerns. This will require a robust regulatory regime, which will build on existing regulations and which will also fully take account of the need for sensible and multiple land use, based around well-resourced regional planning and cumulative risk assessment. The regulation of abandoned wells, the abandonment process and the long-term prospect of ‘orphan wells’ are topics that require more careful consideration by regulators. A difficulty for governments if a shale gas industry rapidly expands, will be to find regulators with appropriate experience. It is in the interests of

government and industry to ensure that this issue is addressed, particularly to ensure that companies less experienced in shale developments can be enabled to follow best practice.

I have concerns as to how the issues underlined will be addressed. How these issues will be addressed needs to be made public specifically, clearly and transparently before the moratorium can be removed and if necessary it should be extended until each issue is addressed.

- b) Performance standards for managing environmental and health risks, including water quality, air quality, chemical use, waste disposal, land contamination and geotechnical stability:

<http://www.ntn.org.au/wp/wp-content/uploads/2013/05/Symptomatology-of-a-gas-field-An-independent-health-survey-in-the-Tara-rural-residential-estates-and-environs-April-2013.pdf>

Having read the above article I seriously question how honestly our state governments are prepared to be with the public. I have not been able to find evidence that the concerns and questions raised by this publication have been adequately addressed.

6. Relevant domestic and international reviews and inquiries covering the management of risks for similar industries including but not limited to the Victorian Auditor General Office's report *Unconventional Gas: Management Risks and Impacts* and other reports generated by the Victorian community and stakeholder engagement programs.

I believe that throughout my submission I have mentioned references to appropriate domestic and international reviews and inquiries of the industry. I have not been convinced by any reports that there is adequate evidence that Unconventional Onshore Gas Mining is a viable option for Victoria or indeed Australia.

I have found no evidence that supports a need to use fossil fuels to be extracted from our land when there are renewable options. The fact that the majority of gas is to be exported is something I do not believe to be worth the risk to our life style, our land, our water, to the sustainable opportunities that we should be striving to develop and achieve.

In Victoria there have been many communities that have actively sort to make people aware of the Unconventional Gas Mining Industry and as a result many have declared themselves to be gasfield free. I do not believe this is an emotion based reaction to the industry, I believe it is a reaction from the public who feel they have not been adequately informed by governments as to what the industry is.

I believe there is no place in our state for this industry let alone in our country. Please do not allow Victoria to become another Queensland.

Regards Bernadette Tapscott