

Submission to Parliamentary Inquiry into Unconventional Gas in Victoria

Thank you for the opportunity to provide a submission to this Inquiry.

In terms of my background I am currently retired. Professionally, I was employed as a member of the Senior Executive Service in the Victorian Public Service. For most of that time I worked in the Department of Agriculture and most recently, I was employed as a senior manager with CSIRO in Victoria.

Although I have done volunteer work in my leisure time, I have never been involved in any community “activism” (for want of a better word). I am not a member of the Greens or any political party, however, I applaud the Greens for their position on CSG. I feel so strongly that onshore unconventional gas mining is totally inappropriate that I feel compelled to volunteer significant hours of my time to inform the community and coordinate efforts locally. I fundamentally feel that it is wrong to be trying to extract this resource from the ground, we don't need this gas and there are far too many risks. We have no moral or social right to impact on the livelihood of so many farmers who are trying to make a living off the land to benefit us as consumers. Onshore unconventional gas mining has no place where people live, nor is it appropriate on or near precious natural resources such as the internationally significant Gippsland Lakes RAMSAR wetlands site, our Ninety Mile Beach or other tourist destinations in the State.

I live in East Gippsland and although there is no gas mining licence on the land where I live, we will **ALL** be impacted, whether we live in the country or city, should onshore unconventional gas mining proceed in Victoria. There will be adverse environmental, public health, social and economic impacts and evidence for this is building. Our food security will also be threatened.

I was extremely disappointed about the Community Consultation process that was initiated by the former government. There were many problems with it from the beginning of the process to what was eventually reported; these concerns are documented in an email that I sent to Minister D'Ambrosio after the final report from the Primary Agency was released in May. I am commenting about that final report because I understand that it is being referred to this Committee for consideration. It should be noted that the report relied mostly on the results of a 15 minute random telephone survey and did not present the level of concern that was expressed at the many public meetings held around the State. Please refer to an attachment that contains that email and is part of this submission.

In Victoria we are fortunate to be in a position to stop this industry from taking a foothold. It is incumbent on this Government to do its due diligence, ensure our safety and protect other industries such as tourism, agriculture, fishing and horticulture; the only possible outcome is to permanently ban onshore unconventional gas extraction as has happened in a number of places around the world or, at a minimum, extend the moratorium for 5 years (refer VFF resolution and Tasmania). **The voices that this Government needs to listen to are the over 60 communities (and this will increase) that, through a survey process have said overwhelmingly “no” to gasfields on their land.**

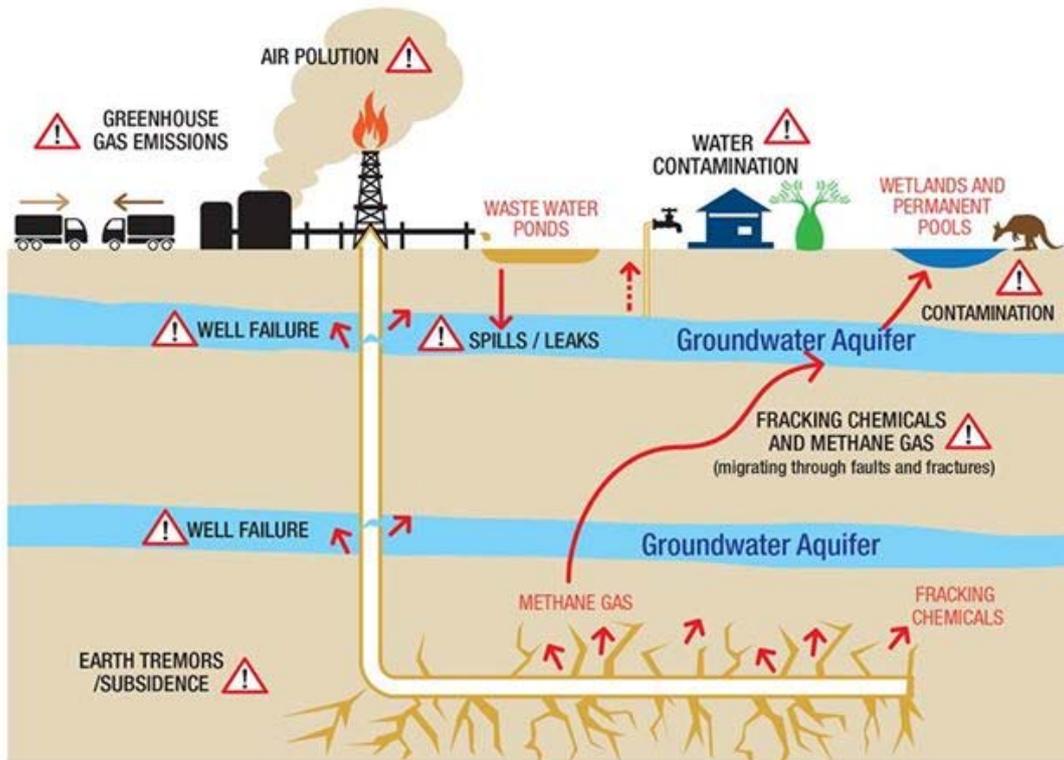
Issues

Please refer to the points below, documented against the issues to be examined by the Committee:

- i) **The potential benefits of onshore unconventional gas as an energy source for the State**
 - The current extraction of unconventional gas in Australia is to meet export contracts with Asia. **Because the gas is not going to be used in Victoria (nor is it needed due to offshore supplies) there can be no potential benefits of onshore unconventional gas as an energy source for the State.**
 - The Australia Institute (TAI) has done a lot of research on mining and has data that would assist the Committee. The following quote is from Richard Denniss of TAI as reported in the Herald Sun - ***“the truth is that gas in Victoria is cheap by world standards and gas producers would prefer to sell it overseas for much higher prices. The price rise is not an accident or an unfortunate side effect – it is the objective. Gas producers want to sell at a higher price. They want to link to the eastern gas market. No matter how much CSG is extracted from Victoria, the world price isn’t going to fall.”***
 - The eastern states of Australia do not have a reservation policy to keep any gas for the domestic market. A quote from the Australian Workers Union (AWU) report on coal seam gas is: “The Australian Government does not support calls for a national gas reservation policy or other forms of subsidy to effectively maintain separation between domestic and international gas markets or to quarantine gas for domestic supply. As gas producers and suppliers to domestic and international markets, **these players will be able to divert gas from the domestic market to the international market.**” Then after the AWU report was spoken about on the ABC, the Herald Sun reported APPEAS’ reply: “APPEA likens the unions demand for natural gas reservation to protectionism.” APPEA emphasized in it’s statement that Australia has more than enough gas for export and domestic markets “but unnecessary regulatory hurdles are making gas production much harder and much more expensive than it need be.” **As APPEA is saying there is more than enough gas for domestic markets, why do we need to extract gas from onshore in Victoria, clearly it is not for Victoria’s use!**
 - We don’t need more gas, we need more renewable energy. In the fracking process methane leaks without being burned. This is a major concern and it is making climate change worse. It is time to make more investments in renewables as many countries (Germany, Denmark as examples) are doing around the world. Please view this video: <https://youtu.be/o78j7717XUw>
 - Refer to this research for suggested actions that would not rely on gas: http://www.energy.unimelb.edu.au/files/site1/docs/2323/The%20dash%20from%20gas.%20Could%20demand%20in%20New%20South%20Wales%20fall%20to%20half%3F_1.pdf
 - **The bottom line is we don’t need the unconventional gas resource so leave it in the ground for future generations in case it is needed.**

- ii) The potential risks, including risks to the environment, land productivity, agricultural industries and public health, and whether such risks can be managed

This diagram below provides a useful summary of risks.



- A Research Paper by the Research Service of the Parliamentary Library entitled “Unconventional Gas: Coal Seam Gas, Shale Gas and Tight Gas” December 2013, is provided at the link below for the information of the Committee. Chapter 2 of the paper provides most of the risks and presents information relevant to many of the terms of reference of this Inquiry. **I am stunned that this information has been available in Parliament for over a year and a half and yet the community is being made to feel that we are fear mongering and overstating the risks. Please read this Paper so that you can see the risks have been identified in the Government’s own research.** Please consider asking for this paper to be brought up to date as the evidence will be even more compelling against proceeding with onshore unconventional gas mining in Victoria:
<http://www.parliament.vic.gov.au/publications/research-papers/8927-unconventional-gas-coal-seam-gas-shale-gas-and-tight-gas/download>
- Data on seismic hotspots needs to be investigated as fracking is a known contributor to earthquake activity. It would be irresponsible to allow fracking to occur in areas that are prone to earthquakes. Refer to this article about a site that was closed in the UK because it was found to cause an earthquake. The article also discusses the many health impacts of fracking:
<http://www.theguardian.com/environment/2015/jul/03/people-power-has-shut-the-doors-on-fracking-in-the-uk>

- On the website for Hon Tim Bull MP's it says: *"East Gippsland is home to many important industries that drive the local economy including tourism, fishing, agriculture and horticulture. The region has a promising future and is a great place to both visit and live."* No one will want to visit or live in a gasfield and the financial value of the above industries will be threatened.
- Please refer to a report from Dr Jeremy Moss of the University of Melbourne called, **"Is Fracking Good for Your Health."** Indeed Dr Moss should be consulted about all the relevant research that he has conducted.
- Uranium is naturally occurring in the ground and will rise to the surface during the fracking process. Please note this article about radioactivity concerns: [Http://ehp.niehs.nih.gov/1408855/](http://ehp.niehs.nih.gov/1408855/)
- Please refer to this article about EPA findings in the US: <http://www.beaconbroadside.com/broadside/2015/07/epas-study-of-fracking-media-hype-and-reality.html>

I quote: *"perhaps the most important thing to note is that this EPA study is limited to drinking water. As we describe in our book, [The Real Cost of Fracking: How America's Shale Gas Boom is Threatening Our Families, Pets, and Food](#), the impacts of unconventional extraction go far beyond drinking water and include, for example, air quality, noise, quality of life, traffic, crime, infrastructure, and economic activity. A full assessment of this large experiment in industrialization of the landscape cannot be limited to one variable that we still do not fully understand. The EPA study did little to decide the issue. Much more work will be required to understand the degree to which this process has widespread impacts. The long-term solution, however, is to move away from fossil fuels to renewable sources of energy. This is within our reach, but will require removal of the massive subsidies provided to the fossil fuel industry.*

iii) **Whether and how an unconventional gas industry could coexist with the legal rights of property owners and existing land and water uses**

- An unpublished government report in the UK found that the leaking of waste fluids could harm the natural environment and water sources and fracking operations were likely to have a dampening effect on house prices – likely to fall by up to 7% within a mile of wells, while households within a five mile radius could find their insurance costs rising significantly. This information is in this article called **"People Power has shut the Doors on Fracking in the UK"** as well as other useful information for the Committee: <http://www.theguardian.com/environment/2015/jul/03/people-power-has-shut-the-doors-on-fracking-in-the-uk>
- We need our agricultural land for food to feed us. We are putting at risk a commodity that would be difficult to reinstate given the chemicals used and high volumes of water that would be depleted from the aquifers that we need for agriculture/horticulture. The gas wells are short-lived with current data from California showing wells last for only nine years.

- There are biosecurity issues that have to be met on farms. The volume and nature of truck/vehicle traffic would make biosecurity a major issue.
- Farming in Victoria is different to Queensland and is more intensive, with more fencing and our land is more productive. If you haven't seen the network of wells from the air, go to Google Earth and look at Chinchilla.
- Farmers should not be put in a position to have to defend their livelihood; this is outrageous! There will be some farmers who are not producing on their land, however, the bulk would be forced out eventually should this onshore gas industry proceed. Although the right of veto has been proposed, this will put farmer against farmer and those that sell out will enable the industry to get a foothold and what will eventuate is what we see in Queensland where farmers have been forced off their land because they can't live with the noise and pollution of living in a gasfield.
- It is not appropriate to have gasfields near where people live. Would members of the Committee want to live in a gasfield?
- The Gippsland Lakes is a RAMSAR protected site. Gasfields will impact significantly on this area; migratory birds will not be able to co-exist with noise, lights and pollution. The Gippsland Lakes is home to a unique species of indigenous protected Burrunan dolphins that would be impacted by changes in water quality and fish species.
- Water is our most precious resource in a country that is drought impacted. A water study was to have been undertaken and provided to the Inquiry. It has been stated in a public forum that the aquifer system in East Gippsland is very complicated and that it is not totally understood; it would be irresponsible to allow mining companies access to aquifers. Given a huge amount of water is needed in fracking this is a reason to be very concerned.

iv) How this issue is managed in other Australian and international jurisdictions

- There is a long list of countries and States that have decided to permanently ban onshore gas mining or put in place an extended moratorium. This information as already supplied to the Committee needs to be carefully reviewed and a permanent ban needs to be considered.
- Chapter 6 of this paper provides information on other jurisdictions: <http://www.parliament.vic.gov.au/publications/research-papers/8927-unconventional-gas-coal-seam-gas-shale-gas-and-tight-gas/download>
- Recently in Tasmania the State government made a decision to put in place a 5 year moratorium with the following rationale, "***Tasmanian Primary Industries Minister Jeremy Rockliff said there was uncertainty around fracking, and his decision would "protect Tasmania's reputation for producing fresh, premium and safe produce."*** Victoria needs to heed this message and do the same as we face the same risks.

v) Potential changes to our legislative and regulatory framework

- See Chapter 4 of the above Parliamentary Research paper.
- There is no confidence that legislation and regulation will prevent environmental disasters and well failures. Given the large number of wells needed, there will be insufficient resources to monitor them.
- See Dr Matthew Currell's submission (# 11) for evidence in relation to the problems with regulation including inherent problems with well integrity and their failure that will create regulatory compliance problems. An audit of well cementing casings needs to be conducted to ensure the integrity of existing wells. The onus needs to be on industry to demonstrate with quantitative data that the cementing is sound.
- There is regulation in place in NSW and yet AGL was fined for an EPA violation (which was a totally inadequate fine given the significant nature of the infringement). There is insufficient information to ensure the industry is regulated appropriately for Victorian conditions and geology.
- Current fines for noncompliance are inadequate.
- Problems exist around the world where baseline data hasn't been gathered.
- I ask that the Committee visit the abandoned wells at Seaspray to see the condition that Lakes Oil left the area. There are only a few wells there however the plastic on the evaporation pond has split and other concerns have arisen; it leaves no confidence what will happen in the future if further exploration is allowed as they couldn't even rehabilitate and properly clean up a small area when they were allowed to operate.
- Here is a quotation from Dr Steve Hambleton, President of the Australian Medical Association, May 2013: "***Despite the rapid expansion of CSG developments, the health impacts have not been adequately researched, and effective regulations that protect public health are not in place. There is a lack of information on the chemicals used and wastes produced, insufficient data on cumulative health impacts, and a lack of comprehensive environmental monitoring and health impact assessments. In circumstances where there is insufficient evidence to ensure safety, the AMA recommends that the precautionary principle should apply. This is essential given the threat of serious and irreversible harms to human health.***"
- Pharmaceutical drugs are rigorously tested to ensure they are safe before being released for public use. What are the safeguards that will be provided by Government?

Conclusion

- The strong opposition to unconventional gas mining from communities that have to potentially live in a gasfield is growing; over 60 communities have said NO to gasfields on their land. These voices need to be heeded as these are the people who are most impacted.
- Consideration must be given to the many industries: tourism {in its many forms}, horticulture, agriculture, and fishing (commercial and hobby) and the internationally significant natural resources that could be detrimentally impacted that cannot co-exist with gas mining; the loss side of the equation is significant. Refer to data from the Australia Institute for corroboration.
- Current data shows there isn't a shortage of gas offshore in Victoria and demand for gas by Australian consumers is decreasing. This gas is not destined for domestic consumption and extracting it is what will contribute to increasing the domestic price. The real pressure is that gas companies don't have enough gas to meet their contracts overseas so they are trying to access gas to meet their Asian contracts, hence their interest in Victorian unconventional gas to be piped to Queensland.
- There is insufficient information to ensure the industry is regulated appropriately for Victorian conditions and its geology.
- The documented risks of CSG mining continues to grow and the only safe outcome is for a total ban on unconventional gas mining, or at a minimum, to extend the moratorium for another five years like Tasmania.

Thank you for considering my submission.

Kind regards

Debbie Carruthers
[REDACTED]