

Keir Delaney
Secretary
Environment and Planning Committee
Parliament House
Spring Street
Melbourne
Vic 3002

Paul Calvert



22nd June 2015

Dear Committee Members,

Re: Inquiry into Unconventional Gas

My name is Paul Calvert and I live in Northcote. I have a small property in South Gippsland, where I plan to retire within the next 5 years. In the meantime I visit as often as I can. The profound feeling of peace and tranquillity my rural property and the surrounding area gives me when I am there, is something of infinite value to me.

I would like to make it clear that I do not support any form of unconventional gas mining, whether coal seam gas, tight gas, shale gas or underground coal gasification. On a personal level, the possibility that such activity could compromise the beauty of an area I love and where I plan to spend my retirement is something I find deeply disturbing.

On a wider level, I would like to address the terms of reference as follows:

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

I believe the potential financial gain to be made from unconventional gas mining is small, especially when weighed against the value and future health of water, farmland, community health, food security and the environment. Jobs in areas such as agriculture and tourism would also be threatened. Why would we risk loss or damage to any of these vital things for so little?

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

I believe one of the major causes for concern is water contamination as nothing can survive without clean water. There are many documents pertaining to this and other potential negative health and environmental impacts. Below are 2:

Extract from website *The Conversation*

<http://theconversation.com/dealing-with-the-health-risks-of-unconventional-gas-10987>

"The fundamental public health issue is the potential for water contamination by chemicals which could seriously affect human health decades after exposure. Health impacts may arise from the use of fracking chemicals or from the release of hydrocarbons and other contaminants from the coal seams."

Extract from website *MJA Group Australia*
<https://www.mja.com.au/insight/2014/17/gas-mining-health-concerns>

“In the letter, Professor Marion Carey, associate professor at Monash University, and co authors, wrote that the NSW Environmental Protection Authority had confirmed contamination of an aquifer by a coal seam gas (CSG) operation in the Pilliga Forest in north-western NSW. It found elevated levels of heavy metals and uranium in groundwater adjacent to a pond holding water produced as a by-product of gas mining.”

Additionally there is much anecdotal evidence of negative health impacts due to noise and air pollution in existing unconventional gas mining operation in the United States as well as Qld and NSW. We must pay serious heed to these lest the same things should eventuate here in Victoria. Given our greater population density, the effects would be multiplied.

3. The coexistence of onshore unconventional gas activities with existing land and water uses including –

a. Agricultural production and domestic and export market requirements

As previously mentioned, water contamination is a primary concern; agriculture cannot exist without a reliable source of clean water. In Gippsland alone, it is not worth the risk to compromise:

- The dairy industry in Gippsland: the highest value agribusiness industry in the region. In 2006 it produced 30% of Victoria's milk production and 20% of Australia's dairy production, making it one of Australia's leading dairy regions. Milk production comprises about half the total value of Gippsland's agricultural commodities and earns an estimated farmgate value of \$624 million. (Dairy Australia, 2006).
- Grazing and meat processing industry based predominantly on beef, but also wool and prime lamb production. Gippsland produces 25% of the total value of Victorian beef production and a significant proportion of the high value beef products are exported. The total 2006/07 value of all meat and wool production was \$361 million and \$146 million respectively
- The vegetable industry is also important in Gippsland. The trend for the industry is to market fresh vegetables. However there has been an increase in the quantity of value-added processing in Gippsland that is supplied to both national and international markets. In 2003/04, vegetable industry production was valued at \$82.9 million

Source: <http://www.depi.vic.gov.au/agriculture-and-food/food-and-fibre-industries/region-overviews/gippsland>

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

I have firsthand experience of what it is to enjoy a rural lifestyle. The ongoing activity of the community engaged in its various occupations is a source of great joy to me. In the country, property is much more than an asset; it cannot be traded in for cash for an alternative lifestyle and it can't be swapped for material goods. The value of peoples' homes and land is much more than money and should never be placed on the table as a bargaining chip. Unconventional gas mining has no place in or anywhere near a back yard or a farm or a park.

c. Any implications for local and regional development, investment and jobs

Victoria enjoys some of the most beautiful rural scenery, pastoral land and national parkland in Australia. That we still have difficulty recognising the value of our environment, favouring instead the short term gains of money is something that astounds and saddens me. What is even more disturbing is that we would consider giving the green light to an activity such as unconventional gas mining with its minimal financial gain and great potential for long term damage and destruction. Unconventional gas mining will not generate more jobs. On the contrary, given the damage it has caused to the environment and to people in other states and internationally, it is far more likely to have an adverse effect on regional development, investment and jobs. Surely this would not be what the state labor government, a 'jobs' government, would want to promote.

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

a. An ability to provide a competitive source of energy and non energy inputs for Victorian industries

Unconventional Gas is a fossil fuel. By definition, unconventional gases are harder to extract than conventional gas.

b. An affordable energy source for domestic consumers

The energy cost of unconventional gas is high compared to conventional LNG due to the complex processes required to extract it. Additionally, the government plans to export massive volumes of gas and as a result, Victorian consumers will be competing with international energy prices in the coming year. It follows that unconventional gas is unlikely to be an affordable energy source for consumers. Instead we need to look at ways to improve energy efficiency. At present we have no choice but to use fossil fuels but if we are to move forward on a sustainable and affordable path, we must find ways to use less while transitioning to renewable energy.

c. Carbon dioxide emissions from these sources

Carbon dioxide and other polluting emissions from unconventional gas mining and other fossil fuel extraction will always exceed emissions from renewable energy sources. It is critical for our long term future that these emissions are brought under control. Extending fossil fuel extraction to include unconventional gas mining clearly flies in the face of this pressing need.

5. The resource knowledge requirements and policy and regulatory safeguards that would be necessary to enable exploration and development of onshore unconventional gas resources, including —

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

Unconventional gas mining has failed to be proven safe elsewhere, in spite of regulation. The industry has had a long time to prove the safety of their practises and has been unable to do so. Historically we have seen time and again, across all mining industries, the failure of regulation to provide safe practises for a whole range of reasons, not least the interest of corporations in profit. Environmentally speaking, we are now at the point where the risk is too great.

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

The risk of long term damage to our water sources and ecosystems and therefore to our future sustainable health and prosperity is simply too great for the small potential financial gain.

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: Managing Risks and Impacts (contingent upon this report being presented to Parliament) and other reports generated by the Victorian community and stakeholder engagement programs.

I recommend that Victoria ban all unconventional gas drilling permanently. I firmly believe that a permanent ban will give certainty to existing industry (agriculture & tourism), making Victoria a more attractive place for investments in these industries plus new investments such as renewable energies. It is action such as this which will create more long term jobs in sustainable industries.

Yours Sincerely,

Paul Calvert