Dear Committee members,

My partner and I moved to South Gippsland 6 years ago to start a farming enterprise. We left senior jobs in advertising and infrastructure. Our farm is sustaining us, supporting local businesses and providing food for Victorians.

We oppose any form of unconventional gas mining. As do 97% + people around the area we live.

Like most farmers, we are busy, but we feel this issue is too important not to take a moment to write our objection.

I have cut and pasted this from the CSG free Poowong website. It echos sentiments and I agree with all of the points they suggest we make.

We the points raised are not anecdotal in nature. They represent fact and the impact of existing unconventional operations.

We also note that in a recent Carbon Tracker research launch in London 7/7/15 – there is a global glut of LNG so it is not in demand. It is not needed locally or abroad.

We want to see Victoria ban all unconventional gas drilling permanently. To giving certainty to existing industry like agriculture and tourism and, making Victoria a more attractive place for investments in these industries. Which will create more long term jobs in sustainable industries.

Terms of Reference:

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

The risk is too great. It's underground and as seen in other states, low risk still means incidents happen and contaminate farmland, community health, food security, environment and jobs in other sectors such as agriculture & tourism for little or no financial gain.

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

We are in a more densely populated region than QLD so any incidents similar to the ones they have had will be greater. 3. the coexistence of onshore unconventional gas activities with existing land and water uses, including —

A key issue relating to this industry is the question of its likely impacts on agricultural production and domestic and export market requirements.

Use figures from local council and government websites to show what our existing industries (agriculture in particular) are worth to the states economy and the potential for growth here and why that cannot happen if unconventional gas mining goes ahead.

If you're a farmer talk about how the infrastructure required for gas wells (all weather access roads, cleared well pads, compression stations, evaporation dams) would make the day to day running of your farm unviable.

- (a) agricultural production and domestic and export market requirements;
- No one will buy our product if CSG is here. They want natural food from a trusted source.
- (b) the legal rights of property owners and the impact on property values; and
- (c. any implications for local and regional development, investment and jobs;

Like with the recent Desalination project, it didn't create local jobs. Specialist contractors are brought in and that would be the case here. The

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

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

- (a) an ability to provide a competitive source of energy and non energy inputs for Victorian industries;
- (b) an affordable energy source for domestic consumers; and

Because they need to be fracked to release the gas from the coal seam or rock, the energy cost of the gas is high compared with conventional LNG. Additionally, with the government plans to export massive volumes of gas through ports in QLD, Victorian consumers will be competing with international energy prices in

coming year. So UCG is unlikely to be an affordable energy source for consumers. A much better option is to look at ways we can reduce our need to use gas (for instance through ensuring better energy efficiency standards in new homes and a gov't funded energy efficiency retrofit program for existing houses etc

(c. carbon dioxide emissions from these sources;

Use examples of emissions and fugitive emissions from UCG comparing these to renewable energy sources. Air pollution from gas treatment plants is also important to mention and it's human health impacts.

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 —

Give examples of why this industry (regardless of regulation) has failed to be proven safe elsewhere. Put forward that the industry has had a long time to prove that their practices are safe and yet have been unable to do so. Talk about why the industry, however much it can reduce it's risks by regulation will always pose a rick and any risk is too great.

- (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; and
- (b) performance standards for managing environmental and health risks, including water quality, air quality, chemical use, waste disposal, land contamination and geotechnical stability;
- 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.

Other points to consider:

UNCONVENTIONAL GAS IS A HIT AND RUN ASSAULT ON FAMILIES, COMMUNITIES AND AGRICULTURAL LAND

UNCONVENTIONAL GAS IS THE ASBESTOS OF OUR TIME

Health Impacts

- local children have near universal and severe skin irritations and asthma which worsens with proximity to the gas fields. Severe and recurrent nosebleeds are common.
- Severe neurological effects: McCarron found one third of children at Tara had parasthesia (abnormal sensations and numbness) and some had "abnormal movements" (central nervous damage).
- Severe effects on the unborn: US studies have shown 100% increase in neural tube defects and 30% increase in congenital hear defects.
- Huge increase in particulates which are class one carcinogens
- Wide range of toxic chemicals which show levels 10-100x above safe levels
- Existing health reports have suffered from poor methodology such as being based on affected people volunteering information only or intermittent testing which was discontinued, and are also hampered by the confidentiality agreements

Environmental Impacts

- release of very potent green house gases including methane, that nullify any GHG saving associated with the transition from coal to gas
- unconventional gas extraction uses masses of water, draining our scarce water resources
- aquifer contamination with toxic chemicals
- release of naturally occurring BTEX compounds and other contaminates into the atmosphere and into groundwater

- "produced water" is left in ponds that will inevitably leak or spill or sprayed on local roads
- multiple earthquakes are associated with fracking and csg globally
- toxic acid rain which strops paint off cars (Ph 4.36 McCarron)
- failure rates of gas wells increase each year

Agricultural Impacts

- contamination of water (flammable water) with toxic chemicals, leading to poisoning of livestock and contamination of our high quality agricultural industry products
- increase in groundwater and soil salinity
- depletion of groundwater
- contamination of water (flammable water) with toxic chemicals

Community Impacts

- immediate community impacts include division and mistrust, then falling property values as the industrial process occurs and health impacts start to bite, agriculture being impacted, followed by families being bought out under confidentiality agreements, and communities being closed or relocated.
- unconventional gas extraction has near universal local disapproval, is strongly resisted, and proceeding is against communities self determination

"We need jobs but not ones which poison our children and destroy our future" - Dr McCarron

Where to look for more information:

Friends of the Earth

UCG Inquiry submissions - FoEM Tips sheet on writing your submission with explanations on the terms of reference.

National Toxic Network: www.ntn.org.au/wp/wp-content/uploads/2015/02/Submission-SA-Fracking-Inquiry.pdf seems like

unconventional gas extraction releases hundreds of BAD chemicals (and their impacts)

Doctors for the Environment Australia: Topics | Healthy Planet, Healthy People | DEA Reports on health impacts of unconventional gas

Dr McCarron ▶Dr Geralyn McCarron Health Impacts of CSG - YouTube Concise and powerful summary of health impacts including her original research in Tara on affected Australian families

Lock the Gate

Reading - Lock the Gate Alliance basic fact sheet about unconventional gas

https://d3n8a8pro7vhmx.cloudfront.net/lockthegate/pages/182/attachments/origin al/1429576918/6_READ-WRITE_-TALK_IT.pdf?1429576918 communications primer, plus useful list of sites and a horror pic of describing spatial intensity in the gas fields

New York

The big survey that lead to fracking being banned in New York State https://www.health.ny.gov/press/reports/docs/high_volume_hydraulic_fract uring.pdf

Pennsylvania

DEP finally releases list revealing 243 cases where drilling contaminated water wells Controversies - Pennsylvania Finally Releases List of 243 Cases of Water Contaminated by Oil and Gas Drilling - AllGov - News

UK

Reports & Evidence | Frack Off Useful references here