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From: Committee Services Office
Sent: Sunday, 5 July 2015 3:06 PM
To: EPC
Subject: New Submission to Inquiry into Unconventional Gas in Victoria.

Inquiry Name: Inquiry into Unconventional Gas in Victoria.

Mr Martin Pritchard
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SUBMISSION CONTENT:

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I wish to express my strong view that there should be a long-term ban on the exploration and mining and extraction of onshore unconventional gas.

The precautionary principle should be used as a guide to ensure that all environmental, social and financial equity issues of the unconventional gas industry are fully resolved before any further exploration or extraction is allowed.

There is currently enough evidence to suggest that the unconventional gas industry creates significant negative environmental impact and human health hazards. I note the following concerns:

- the use of toxic and poisonous chemicals used in the hydraulic fracturing process which can contaminate underground water resources that are not just localised to the mining area. Farming communities often rely on underground water for irrigation of crops and water for livestock.

- the storage, disposal and leakage of saline waste-water. Evidence would indicate that this waste water is not always managed in a responsible way causing land salinity issues.

- methane leakage into underground water. I have seen evidence presented where underground water extracted in gas field areas contains flammable methane. This not only makes the water non-potable, but presents a serious fire and health hazard.

- methane leakage into the open environment. I have read evidence where unconventional gas sites leak methane into the open environment. Some proponents of unconventional gas try to sell the technology on the grounds of its environmental credentials where the gas extracted is used as an energy source for electricity generation producing fewer greenhouse gas emissions compared to the coal that it is substituting as the energy source. However, long term methane gas leakage from unconventional gas sites has a far higher negative environmental impact, both in terms of air quality and global warming – nothing that methane has a greenhouse gas warming potential approximately 23 times higher than carbon dioxide

produced through the burning of coal.

Whilst risk mitigation measures may be able to reduce the risk of high volume methane leakage, there is a residual risk both during the extraction process and additionally after the gas field has been exploited. What is the 50 year plan, the 100 year plan the 200 year plan to manage and monitor these gas fields after the resources have been exploited to the extent to which they are profitable for the extraction company? Who will pay for monitoring and leak detection? Who will pay for the repair of cracked and leaking casings? What would be the impact of a seismic event such as a minor earthquake in a gas field area either during the time of extraction or after the time of extraction? What will be the impact of methane gas leakage on bushfire risk?

- social licence to operate. I note that large amounts of Victorian land have unconventional gas exploration claims made on them. I also note that where communities are fully informed of the risks proposed by unconventional gas extraction they often strongly oppose mining on their land. I am also aware that some informed communities in Victoria have declared themselves 'Coal seam gas' free with over 90% to 95% of community members signing up to make this declaration. I also note that some local governments oppose the development of unconventional gas fields in their area. In short, companies proposing the explore or mine gas using unconventional measures do not have a social license to operate when communities are informed about the industries impacts. Communities and local government should have more rights to refuse unconventional mining and exploration.

Literature, evidence and case studies can all be found to add weight and credibility to the concerns raised above. I do not pose the time to refer and reference to these resources, however, I am confident that others who are better resourced and focused on this issue will present the required evidence to add weight to these concerns.

Given the residual risks that can not be mitigated and the high environmental and social costs of unconventional gas extraction (both in the short and longer term), it would be much wiser to impose a long term ban on unconventional gas extraction and exploration. Instead, there should be increased regulatory and financial support for investment in clean renewable energy sources. Any argument for job creation through gas extraction can equally apply to the establishment and maintenance of renewable energy assets. When the subsidies (direct and in-direct) and costs (internalised and externalised) of energy generation from fossil fuels are taken into account, then renewable energy becomes extremely competitive in terms of price efficiency in the current market with predictions for renewable energy sources to be more cost efficient in the future. Renewable energy sources will continue to provide clean energy long after the gas fields have been depleted of gas. What is the estimated number of years that these gas fields will be productive for how many decades? How many hundreds of years? That is the time scale we need Government to be looking at when thinking about the future. What is best for Victoria and Victorians not just 'now', but in the long term future.

Before any decision is made to allow the extraction of unconventional gas, long-term peer reviewed independent research needs to be conducted and prove beyond doubt that residual risks can be managed and that there are no negative environmental impacts in terms of soil health (food production, pasture grazing) and water quality. Social inequality issues and the right for individuals, communities and Councils to ban unconventional gas extractions on their land also need to be addressed.

I trust the committee will make the correct decision and recommend that there need to be a ban on unconventional gas exploration and extraction in Victoria.

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File1:

File2:

File3: