

Friday 10<sup>th</sup> July 2015

To the Committee,

### **Submission to the Inquiry into Unconventional Gas in Victoria**

Southern Otway Food Co-operative (SOFC) is a not-for-profit community project with a strong interest in sustainable food.

SOFC is opposed to unconventional gas exploitation and requests the State Government permanently bans all aspects of this industry in Victoria.

We do not want UCG developments or fracking in our food bowl.

***Of great concern to us is the assumption unconventional gas (UCG) can co-exist with agricultural activities as UCG is likely to increase the pressure on limited water resources through direct competition with landholders and environmental water reserves and through contamination of water supplies.***

The draw-down effect on water tables due to pumping of groundwater is well known in Australian agriculture. The extraction of water for UCG operations is projected to negatively effect aquifers and above ground water flow, reducing water availability and decreasing aquifer pressure and stream recharge.

The high water demands of the industry will cause competition for resources between gas companies and farmers, placing increasing stress on those who supply our food and the natural environmental resources which sustain our food producers. Our organisation views this as is an unacceptable implication of UCG development in a region which has seen many extended drought periods in the recent past.

Many incidents involving contamination of groundwater in other states have already been recorded, with gas emissions from damaged stream-beds reaching combustible levels. Studies overseas indicate there is an unavoidable risk of water and land contamination throughout the production of UCG. There is evidence now surfacing that chemicals released into the environment by UCG operations may be damaging the health of livestock and in some cases, livestock showing symptoms have been processed within the human food chain (Bamburger & Oswald 2014).

There have been no studies into potential contamination of food produced in gasfield regions (Bamberger & Oswald 2014) to determine subsequent risks to human health. This is of concern given a range of endocrine disruptors are utilised in UCG operations (Bamberger & Oswald 2014) which could potentially relate to the elevated birth defects and infant ill health recorded in populations residing within gas fields (Hill 2013, McCarron 2013).

#### ***Health issues***

Unconventional gas developments create many health- related issues including the documented acute symptoms experienced by residents in Queensland and Tara (McCarron 2013), and potential long-term stress-related health issues due to industrialisation of the landscape and

consistent environmental exposure to low levels of toxins (Coram 2014).

Health issues associated with UCG to date include:

- Stress associated with the industrialisation of natural and agricultural landscapes.

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 paraesthesia (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 ear 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

***Unconventional gas is not a sustainable energy source as it will contribute to global climate change and endanger the environmental systems on which we depend for our food and other essential ecosystem services.***

We are already affected by climate change. The scientific reality of the situation, the increasing pressure on ecosystems and the damage to human and animal health are already well documented. Development of another greenhouse intensive energy resource does not make sense in view of the global push to limit climate change to less than 2<sup>o</sup>C warming.

UCG extraction results in rogue emissions of methane at many points in the production chain. Methane is a very potent greenhouse gas, and these emissions will negate any savings association from a transition from coal to gas. This is of grave concern as the evidence suggest all gas wells eventually fail, resulting in methane emissions as well as the release of contaminants into the surrounding environment.

In addition to this, the energy expended to extract UCG results in very little return and will not result in a viable net gain of energy for Victorian domestic or export markets. In comparison, the cost of renewable energy technologies has dropped dramatically in recent years and some renewable technologies are now out-competing convention energy sources in terms of net energy gain. Furthermore, following the initial installation of renewable power generation technologies, no further greenhouse emissions result from operation of that technology.

We urge the Government to increase support for the development of renewable energy in Victoria in order to limit our greenhouse emissions and assist in the push to mitigate climate change.

#### ***There is No Social License for UCG in Victoria***

Over 60 communities across Victoria have declared themselves frack free. About 74% of the Municipal Association of Victoria has voted to oppose unconventional gas and fracking in this state. There is no social license for this industry in Victoria, meaning communities will resist the development of UCG if the moratorium is lifted.

Given the near universal disapproval of and strong resistance to UCG evident within the Victorian community, pushing through this unwanted industry will create an immediate atmosphere of mistrust and division within our state, exacerbated by a quashing of self-determination.

Further disruption to communities which have accompanied the UCG experience in other states include falling property values as the industrial process occurs and health impacts start to surface, followed by families being bought out under confidentiality agreements, and communities being closed or relocated.

In view of these issues and the inability of the unconventional gas industry to safely co-exist with sustainable food production systems, Southern Otway Food Please requests immediate legislation to permanently and unequivocally ban unconventional gas in the state of Victoria.

### **Southern Otway Food Co-operative**

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### **References**

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