

To the senate enquiry:

I live in Victoria, in Mt Duneed, a small rural community between Geelong and Torquay. I am a mother of 3 small children and I am deeply concerned about the prospect of fracking being allowed in our area.

I want to make it clear that I do not support any form of unconventional gas mining (including coal seam gas, tight gas, shale gas & underground coal gasification) ever in Victoria or Australia for the below reasons:

### **Coal seam gas is NOT safe**

Coal seam gas is not proven as safe for human health or for the environment. Coal seam gas operations may have adverse impacts on human health by contamination of drinking and agricultural-use water, and air, according to Doctors for the Environment. In a submission to a parliamentary inquiry Doctors for the Environment say that public health consideration has been inadequate leaving the public at risk from the health risk of coal seam gas operations. Dr Mariann Lloyd-Smith from the National Toxics Network agrees and says that there are a number of concerns associated with coal seam gas drilling including chemicals used for hydraulic fracturing (fracking) as well as those naturally occurring in the coal seam and released during the drilling process. Dr Lloyd-Smith says that health risks may also be posed by the process of flaring gas into the atmosphere and from methane exposure caused by fugitive emissions from various parts of the coal seam gas extraction process.

Testing of water and soil in the Pilliga forest has demonstrated that coal seam gas is also environmentally unsafe. Testing of samples taken from areas near coal seam gas operations detected heavy metals up to 37 times higher than natural levels and five times drinking water. The NSW EPA issued fines and warnings to two coal seam gas operators for pollution of the Pilliga state forest. Other risks that have been observed include unexpected well blow-outs resulting in venting of polluted foam into the air close to a drinking water canal, gas bubbling up through the Condamine river close to coal seam gas operations, and a spate of ongoing symptoms consistent with gas exposure experienced by residents living among operational coal seam gas wells.

Safety cannot be guaranteed by the gas mining companies within 1 km of a well. I do not want my children exposed to the high risk of pollution and I would move away if fracking is ever allowed here. I don't think any politician deciding on this matter would feel comfortable bringing up their children near a well!

### **Coal seam DESTROYS the environment**

Coal seam gas development requires industrialisation of the landscape with infrastructure required to connect wells with access roads, water management facilities, processing facilities, compressor stations, pipelines to power stations and export terminals. Depending on the environment, the impact on the surface can undermine the agricultural productivity of an area or significantly disrupt reliant ecosystems and environmental values of bushland.

The National Water Commission noted it is concerned "coal seam gas development could cause significant social impacts by disrupting current land-use practices and the local environment through infrastructure construction and access".

Coal seam gas requires an ever expanding network of wells to be commercially viable. Over time, this will require a large area to be available for the wells and associated infrastructure. Coal seam gas development cannot co-exist with intensive farming operations. Large tracts of farmland will become unavailable for food production, forests and native bushland will be cleared and fragmented, and residential communities and metropolitan centres will become industrialised.

### **Coal seam gas is a NOT a clean energy source.**

There is not enough Australian research to support industry claims that coal seam gas is a 'cleaner' source of energy. Coal seam gas is an unsustainable fossil fuel that is almost entirely made up of methane. Methane, like carbon dioxide (CO<sub>2</sub>), is a greenhouse gas. Methane is a far more potent greenhouse gas than carbon dioxide. Scientists estimate the global warming potential of methane as 25 times greater impact than carbon dioxide over a 100 year period.

The coal seam gas industry frequently claims that using coal seam gas to generate electricity is up to 70% cleaner than coal. This is a 'best case scenario' comparing gas burnt in a new generation combined-cycle gas-fired power station with the most polluting (brown) coal burnt in an old sub-critical power station.

While the industry states that coal seam gas is a 'cleaner' fuel than coal, there is no way to ascertain the veracity of such a claim because there is no Australian research that considers the full lifecycle emissions of coal seam gas. A recent paper by The Australia Institute suggests that the impact of fugitive emissions (that is the unintentional leakage of gas during coal seam gas extraction, transport and processing) may be significantly higher than that of conventional natural gas. The Australian Department of Climate Change and Energy Efficiency recently released a report it commissioned confirming that no one knows how much methane leaks during coal seam gas operations in Australia.

### **People DON'T want coal seam gas**

Surf Coast Shire and local areas have said a big resounding NO to fracking and local opposition grows every day. The people here do not want fracking!

### **We DON'T need coal seam gas**

While the coal seam gas industry likes to explain the abundance of available reserves by providing examples of how long coal seam gas could power the city or state, much of the coal seam gas being developed is actually planned for export. Calls to reserve an amount of coal seam gas for domestic use have been rejected by the industry. Coal seam gas is an unsustainable fossil fuel and there are clean energy alternatives that are commercially and economically available to be developed in Australia right now. The roll out of the unsustainable coal seam gas industry is a matter of politics, not necessity. Investment in the coal seam gas industry is delaying investment in clean, safe and sustainable energy.

### **Coal seam gas will DESTROY JOBS in Australia and in our local area**

The resources sector is capital, rather than labour intensive. The coal seam gas industry employs less than 20,000. Of this number, only 5,514 are direct employees, the rest are

contractor positions and are not necessarily full time equivalent positions. In any case, if we take the total number of direct employees and contract workers, this still means McDonald's employs around four times more people than the coal seam gas companies, and manufacturing employs fifty times more people than the coal seam gas industry. In addition, coal seam gas projects can crowd-out existing industry and negatively impact on existing land-users such as farmers and tourism operators, a down-turn in existing industries will lead to job losses. New jobs can't come at the expense of existing jobs.

Mt Duneed/ Surf Coast are dependent on tourism and agriculture. Our industries will be destroyed forever. People come from all over the world to experience our beautiful beaches and the amazing Great Ocean Road. Imagine what gas wells popping up all over the place will do to tourism numbers. We also produce quality organic food in the area. This is not compatible with coal seam gas production. Once it is here the industry is destroyed forever.

However if Victoria were to ban all unconventional gas drilling permanently it will give certainties to existing industries (agriculture & tourism), making Victoria a more attractive place for investments in these industries plus new investments such as renewables. This will create more long term jobs in sustainable industries.

I urge the Australian Government to **think of the future generations** of our state. Please be remembered as the government that stood up to these giant coal seam gas companies and decided to do what is best for Australia now and in the future.

Regards

Stina Foster