## Fresh Water or Frack Water ?

People in regional areas are very aware of the need of fresh water. Droughts are a regular occurrence in Australia, which can have devastating effects on rural communities. Fresh-water is essential for all forms of life. In cities we are also dependent on water, but removed from the collection. Just turn open the tap to get it, the rest is Watercorp's problem. Not so in rural Australia. Rains water moistens the soils and replenishes water tanks and aquifers. They are essential elements for regional Australia to flourish, without these rural regions will be dead. Therefore people in rural areas should know what the risks are when gas companies come in to drill and exploit shale-gas. The enclosed document highlights some of the technical and economic issues <sup>1</sup>.

The methods used to get this shale-gas are quite different from the conventional gas exploration and development. For the shale-gas they extensively use hydraulic fracturing (fracking) to make the shale permeable, so the gas can flow out. To counter opposition to fracking, gas companies often say "Things are different here". Is that why the gas industry uses the same geological models and techniques as elsewhere in the world? In addition, why do they use the same drilling methods and equipment as in the rest of the world? If it really was different they would had to use different techniques. Same reasoning can be used for all the damage done. Often hear "yes, but that is in the USA or on the East Coast". As with geological methods and drilling techniques the problems encountered in the USA will be the same here. There is ample evidence from reports and personal experiences <sup>2</sup> that shale-gas fracking is detrimental for any community, rural or otherwise.

No gas company will ever guarantee that drilling and operating gas wells is 100% safe. And they

<sup>1</sup> Attached UC-Gass-Fracking\_Senate-Submission\_txt\_2016.docx

<sup>2</sup> John Fenton, Farmer from Wyoming USA <u>https://www.facebook.com/john.fenton.3511?fref=ts</u>

should not, because they cannot guarantee 100% safety. Gas fracking wells have an even greater risk and rate of failure. There are various reasons for that, one is there are more wells drilled and with every extra well drilled there is another chance of failure and secondly they are deviated. As an analogy, ask any builder if the risk of leaks in the roof increases with the number of vents going through a roof. They will certainly confirm the more vents the more chance of sealing problems. That is exactly the same when drilling through aquifers, the more wells the more chance of leaks. Fracking wells, like any other deep well, for sure intersect one or more aquifers. As mentioned before whenever a well is drilled through an aquifer there is a chance of leakage and failure. Everyone in the gas/oil industry knows that when a reservoir, of gas, water or oil, is damaged it is damaged *forever*. Aquifers are water reservoirs. One of the huge problems with the shale-gas industry is the number of wells that need to be drilled. Not just a couple but hundreds or even thousands in an area. To drill large number of wells vast quantities of water are needed <sup>3</sup>. In addition fracking uses a lot of toxic chemicals that can pollute clean drinking water. This frack-water loaded with chemicals is pumped down the hole and comes back to the surface. Ask yourself where do those chemicals end up?

At a time when there is plenty of factual evidence that in WA there is a downward trend in rainfall, so no extra water should be extracted. But, don't we need gas for our energy needs? In the past yes, society had then no choice but to extract coal, oil or gas as source of energy, but now in the  $21^{st}$  century there is an alternative, namely <u>renewable energy</u><sup>4</sup>.

If gas companies are so sure about they can do everything safely and without problems they should be able to get low commercial insurance premium for at least 50 years to cover potential leaks and any other disaster now and in the future. The premium will be low if the risks are as low as gas companies claim. Now the question is how will the commercial insurers assess the risks as low, medium or high and set the premium accordingly?

There are many examples from the past where the environmental impact was not considered, eg the massive clearing in the wheatbelt. Would farmers nowadays, if allowed by the Government, do less land clearing to avoid salinity problems? I am certain farmers would clear less, because

<sup>3</sup> See attached file : *Fracking-Well-Water-Usage.xlsx* 

<sup>4</sup> Sustainable Energy Now : SIREN renewable modelling software (<u>http://www.sen.asn.au/</u>)

their knowledge about salinity, their care for the land and their long term view about the land. Therefore with all the knowledge available about the negative impact of fracking, should we allow gas companies to likely destroy our land?

I am just focussing on the water used by fracking, not even referring to potential of well collapses and chemical spills, or amount of surface areas disturbed. The amount of fresh water used is enough reason to stop fracking, especially in a dry and increasingly drying state of WA. If agricultural land is destroyed it will be so forever. The result is a loss of potential agricultural exports. Gas companies, they are not local and could be foreign, will be gone for a long time. And above all local communities will be decimated.

As a politician you have been entrusted to look after your constituents and the wider community. The National Party core values are amongst others a belief in 5:

- strong representation of our local communities and the delivery of positive outcomes on the issues that affect their lives and lifestyles
- security for our communities and their families, through the preservation of decent health, safety, social and economic welfare standards

The National party has a duty of care to its rural constituents and so they have to do their utmost to protect amongst other things access to clean fresh water, not promoting toxic frack-water. Therefore, I am urging you to reconsider your stance on shale-gas and coal-seam-gas fracking. Oppose it because of the detrimental effects on rural communities and the environment. Please ask and answer yourself "Is shale-gas fracking worth the risk?"

No to Fracking : We can live without gas and frack-water, because there is a renewable alternative but we can NOT live without fresh water!

<sup>5</sup> National Party website <u>http://nationals.org.au/about/what-we-stand-for/</u>