Submission to the Northern Territory Hydraulic Fracturing Inquiry

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March 2017

Background

I am a third generation Territorian, who has lived, worked and owned cattle stations at both ends of the NT. Even so my exposure to mining companies is pretty much limited to my more recent experience with Pangaea during both negotiating the Access Agreement for Pangaea to come onto Gilnockie to conduct seismic work and also as a contractor to Pangaea clearing lines for them to conduct their work.

My opinion as regards hydraulic fracking is one of general excitement. Here is a means to access cheap fuel that can power the world for many hundreds of years, with minimal associated environmental impact, and that impact can be managed. Economically this will free up much of the staggeringly huge amounts of money currently being used for carbon di-oxide emissions reductions to other uses, such as hospitals, clean water and electricity instead of lung killing dung fires in the third world. To me, it is a no brainer.

My personal journey regarding Hydraulic Fracturing and the irrational fear surrounding it

As an individual who is interested in what happens around the world, and alarmed by the doomsday proclamations of catastrophic anthropomorphic global warming, (CAGW), I went looking for my own answers based on fact and not fear. In doing so, I stumbled upon hydraulic fracking as a side issue and was not surprised when it later reared its head in Australia. Even so I was surprised by the appalling use of fear mongering by the activists and the bullying of those who disagreed with or dared to question the core fear message that ensued. No-one would want to voluntarily engage with that vitriol.

In my CAGW internet tour, I found that fracking for hyrdocarbons had been happening for over 70 years, that the process had been further refined, that it was possible to match the chemical signature of gas to its source. This latter signature proved that the gas leaks shown in the film Gasland by Michael Moore were not from fracking, but biogenic, from shallow coal seams; also that the taps in that country had been lighting up for 100 years, long before fracking came to that area. All this was eloquently rebutted in the documentary FracNation by Phelim MacEveer. It is available at http://fracknation.com/

In addition I was aware of my father telling me of his experience as a drover, there were bores you could not strike a light near when filling your canteens because a big fire would be the result; Kevin Hickey (dec.) told me of an area where gas pooled naturally on the surface of the land and a lightning strike led to a huge explosion. Max Mullins in Katherine also remembers this incident. In addition we have natural vegetative decay which also produces gas in water. In short, gas does seep to the surface in gassy land and water and gas are not mutually exclusive in the natural state.

My sceptical approach to CAGW alarmism lead me to read "The Rational Optimist" by Matt Ridley available here http://www.rationaloptimist.com/ and on Kindle here https://www.amazon.com/Rational-Optimist-How-Prosperity-Evolves-ebook/dp/8003ODI67E/ref=tmm kin swatch 0? encoding=UTF8&qid=&sr=

Reading this book led me to think about the possible positives in situations, not just the apocalypse predictions. So it was with a more open mind that I approached Hydraulic Fracking; in addition, I had

the luxury of learning about it without the shouty pressure of the anti fracking movement sitting on my shoulder.

In Shale Gas (2011) (attached) Matt Ridley with forward by physicist Freeman Dyson; Dr Ridley examines the environmental coast and benefits of hydraulic fracturing for gas.

He talks of waste water recovery (about 1/3 of the water used in the well) and reuse in other wells or treated for disposal being standard in the industry.

He also writes how the process has been refined since the late 80's to use less chemicals but warns that

None the less, shale gas will encounter formidable opposition from entrenched and powerful interests in the environmental pressure groups, in the coal, nuclear and renewable industries, and from political inertia. (p 17)

and

However, as it became apparent that shale gas was a competitive threat to renewable energy as well as to coal, the green movement has turned against shale. Its criticism is fivefold:

- The shale gas industry uses dangerous chemicals in the fracking process that might contaminate groundwater;
- poorly cased wells allow gas to escape into underground aquifers;
- waste water returning to the surface during production, contaminated with salt and radon, may pollute streams;
- the industry's use of water for fracking depletes a scarce resource;
- the exploitation of shale gas damages amenity and landscape value. (p 19)

None of which I deem a reasonable risk based concern following my investigation and based on my personal experience.

In the Pay of Big Gas

As the local activism intensified, I did observe these exact criticisms being shouted including at my husband for daring to allow Big Gas onto Gilnockie - the inference was we must therefore be in the pay of Big Gas and if so were guilty - of exactly what the charge was we were not sure, but the effect was in the activists minds this meant we were not entitled to have an opinion or speak on the matter.

I happily and thankfully declare here that we did undertake work for Pangaea for which we were paid, and were mighty glad to receive that payment as it was in the wake of the catastrophic Live Export Shut Down and we did not have a penny to give our cows the care and attention necessary for their basic humane animal welfare.

There was no environmental damage done, the lines we opened were lines used for fire control and the impact of the equipment - well when they were gone you couldn't see where they had been.

The negotiation process - why it worked.

But to get to that point we had undertaken an extensive negotiation process with Pangaea through our local Best Practise Group.

Overall, working with Pangaea was a positive experience. I believe the reason for this was helped by the fact we already had an active group in the Sturt Plateau (The Stuart Plateau Best Practise Group) who had collaborated together on different topics over the years, ranging from the educational to lobbying the Valuer General, to bulk buying.

This gave us a basis of trust amongst each other and a higher level of sophistication and confidence in negotiating as a group. Also Pangaea was a willing negotiator based, I believe, on good will. They had a *desire* to be a good neighbour.

Even so we had to stick to our guns. Some of us hold land that is 100% weed free and we had to negotiate access that was peculiar to that piece of land, especially when the mining camp was not on that land but situated on adjoining weedy country. We resolved it by the workers being bussed to our boundary and transferring to their work vehicles, so the work vehicles only had to be washed down once on initial entry.

My concerns going forward.

I can only speak for myself and through my personal experience and knowledge.

1. Water

I do have a concern for water and seek better clarification of the total usage. I am mindful that gas well development with higher usage will occur infrequently whilst the rainfall will continue, each year. I am not concerned it will leak or be contaminated, but it can be a scarce resource for my business and can cost huge amounts in terms of exploration (one bore cost over \$100,000.00 for a dry well)so that I do not want to give any of what I might need away for fracking wells. I understand that in my area an alternative source of water has been discovered which could be used for fracking, if that were to be the case, and the use of alternative water did occur; I would withdraw my reservation.

There is another way that water could be used, which is not from an alternative water supply (such as new above ground water storage or currently unusable (quality or deep depth) water and that is to recapture the water from each well (I believe about 1/3) and reuse it in the next well. To do so would lessen the burden on scarce potable and stock water supplies.

2. Existing infrastructure

Infrastructure is a costly investment on cattle stations and it would give rise to grave concern if existing infrastructure were rendered unusable due to placement of well heads or pipelines or roads or any unforseen usage of land by miners. It cost us blood and sweat to get it there, forgoing many other uses for that capital and it would be unfairly onerous to have to pay again to fix a problem.

This area would include the obligation for the miner to treat infrastructure with care, such as not cutting fences or pipelines or leaving gates open.

A way through this would be to be able to plan with the mining company how to minimise impacts on existing infrastructure and going forward. Most of us have property plans that we can use for this process, and we are by nature flexible planners so with good faith planning by all parties this should be achievable. I would prefer this to outright compensation as it would be too easy for miners to just pay the compensation and then do what they liked.

3. Weeds

We are relatively weed free and would like to keep it that way. We spend a lot of money each year controlling the few weeds we do have and have weed management plans in place for our property.

It is a concern that traffic increases the risk of further weed incursion onto our property along with the increased cost burden to manage this problem.

A solution to this would be to have agreed weed management protocols with the miners to minimise this happening and agreed remedial actions to address any incursions. I would like to see the miners engage adequately resourced weed management officers to monitor and address any issues. Such an officer should continue to be employed and funded for five years following cessation of active mining.

4. Future Use

Currently most of my area is used for grazing. However much of it is also suitable for improved pasture and or cropping. This will come to pass, maybe not in the next few years but most assuredly in the next decades.

My concern here is that pipelines and roads or other infrastructure may be placed in areas that prohibit such future use.

A remedy would be to where possible, site infrastructure on land units not suited to clearing or development and to site pipelines in suitable faming land units far enough below ground to still allow ploughing associated with normal crop production.

A Regional Development Plan for our area should be drawn up with input from various agencies including landholders experienced in these matters that then becomes the default plan for the region for the future so far as farming and improved pasture development occurs. This would greatly help all parties in these negotiations. Currently such a plan does not exist, with development occurring on an ad-hoc basis.

I believe my group, the Sturt Plateau Best Practise Group does have the expertise and will to engage in such a process.

5. Recompense

In spite of the best will, breeches of any agreement will occur and it is only fair that the cost of those breeches not be laid upon the grazier who has no real choice in the matter.

It would be important for these remedies to be adequate for purpose and fairly compensated. This should form part of the negotiated access agreement.

In addition, where gas is discovered and harvested, I believe that farmers should receive some of the fiscal benefits of that. The South Australian Government is offering 10% of the Royalties the Government receives as recompense to landholders for having gas mining and harvesting on their land.

While this is commended, it should not in any way replace the obligation of the miner to be a good neighbour as outlined in my concerns above.

6. Social Licence

I disagree with the concept of social licence being given any legitimate consideration. In my experience it almost always used to stop things happening and gives people who have never

invested one cent, or one drop of sweat or blood the appearance of legitimacy of investment. Well they have none. If they want to have a say, they are welcome to have it for their backyard, not mine.

7. Definitions

In the definitions of the terms of reference, page 27, unconventional reservoir is listed as where the gas bearing formation is shale.

How can something that occurs naturally be defined as unconventional?

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