

22/04/2017

To the scientific inquiry into hydraulic fracturing,

I am writing to express my concerns about the proposed hydraulic fracturing for shale gas in the NT.

As a health practitioner I would like to refer you to the *“Compendium of Scientific, Medical and Media findings demonstrating risks and harms of fracking (unconventional gas and oil extraction)”* (2016)¹. This collection of many hundreds of scientific articles is hard to ignore given that these articles are peer reviewed and independently researched. In the conclusion of this 4th edition, they state:

“All together, findings to date from scientific, medical, and journalistic investigations combine to demonstrate that fracking poses significant threats to air, water, health, public safety, climate stability, seismic stability, community cohesion, and long-term economic vitality. Emerging data from a rapidly expanding body of evidence continue to reveal a plethora of recurring problems and harms that cannot be averted or cannot be sufficiently averted through regulatory frameworks. There is no evidence that fracking can operate without threatening public health directly or without imperiling climate stability upon which public health depends. In the words of investigative journalist Andrew Nikiforuk:

“Industry swore that its cracking rock technology was safe and proven, but science now tells a different story. Brute force combined with ignorance ... has authored thousands of earthquakes ... [and] called forth clouds of migrating methane.... The science is complicated but clear: cracking rock with fluids is a chaotic activity and no computer model can predict where those fractures will go. The regulatory record shows that they often go out of zone; extend into water; and rattle existing oil and gas wells, and these rattled wells are leaking more methane”.

And in the words of a new commentary about fracking in the *American Journal of Public Health*:

Mounting empirical evidence shows harm to the environment and to human health ... and

¹ *“Compendium of Scientific, Medical and Media findings demonstrating risks and harms of fracking (unconventional gas and oil extraction)”*, (4th edn), 2016. November 17.

we have no idea what the long-term effects might be.... Ignoring the body of evidence, to us, is not a viable option anymore²".

Having worked in Public and Primary Health in Central Australia for the past 20 years, I am well aware of the vulnerabilities of living in this climate, dependent on only ground water, and 'tucked away from the public eye' (away from the cities of the Eastern seaboard). Any contamination of our water supply will have disastrous consequences, which I expect don't need spelling out. The NT health system is already disproportionately over-burdened, and to add in any further potential 'causalities' as a result of Shale Gas Fracking, poses a very real threat to the sustainability to life and healthcare in the NT.

Please read the document referred to here, in order to come to a considered, rational and science-based decision.

Warm regards

Barbara Molanus

Registered Nurse. MPH. Grad Cert Emerg Nursing. Grad Cert Conservation and Land Management.

² *"Compendium of Scientific, Medical and Media findings demonstrating risks and harms of fracking (unconventional gas and oil extraction)", (4th edn), 2016. November 17, page 209.*