Dear Panel

My name is Bevan Warris and I would like to submit the following for you to consider in your review into the use of hydraulic fracturing in the Northern Territory to extract unconventional hydrocarbons now known to exist in the McArthur Basin.

There have been many Inquiries into the use of hydraulic fracturing around the world and in Australia. Virtually all credible Inquiries have concluded in that the use of hydraulic fracturing is unlikely to pose any significant risk to aquifers or to human health, provided that it is subject to robust regulations.

The following are some of these credible Inquiries

- A The Hawke Reports (2014 and 2015) as well as the 2016 Hunter Report.
- B The Australian Council of Learned Academies Report "Engineering Energy: Unconventional Gas Production A Study of Shale Gas in Australia" 2013. This report found that with appropriate safeguards in place shale gas (unconventional) with the use of fraccing represents no greater risk than conventional gas.
- C The NSW Chief Scientist and Engineer, Professor Mary O'Kane conducted a review of Coal Seam Gas (CSG). The Review examined this issue in detail and concluded that while the CSG industry has several aspects that need careful attention, as do almost all industries, it is not significantly more likely to be more damaging or dangerous than other extractive industries.
- D The Western Australian Upper House reviewed the issue of fraccing, and after two years of examining evidence concluded (Nov 15) that fraccing can be carried out safely if regulated appropriately. It found the impact on human health and the environment were 'negligible' despite widespread concerns about the practice.
- E The South Australian (SA) Natural Resources Committee recently completed (November 2016) a two year Inquiry into unconventional gas and the use of fraccing. It concluded that unconventional gas (fraccing) is unlikely to have any impact on groundwater (aquifers).
- F The UK had a very rigorous inquiry carried out by the Royal Society and the Royal Academy of Engineering specifically to do a report on hydraulic fracturing and shale gas. Professor Sir Mark Walport UK Chief Scientist summed up the findings, with the following

"There are really 3 science and engineering concerns about hydraulic fracturing (fracking). The first of these is: will it cause earth tremors? The second is: will you get contamination of the water

table? And the third is: will there be fugitive release of the methane gas? And what the science and the engineering tell you is that this is a drilling technology and no drilling technology is completely risk-free. But if it is done well, if it is engineered well, if it is governed well, then it is as safe as any other form of drilling, recognising that there is no 'free lunch', there is nothing that is completely risk-free." In line with the UK Inquiry and the recommended outcomes, the UK Infrastructure Bill 2014-15, was passed through the UK Parliament, and it, which among other things will permit fracking below 300 meters in the UK.

I therefore urge the Panel to use all available scientific and engineering evidence in assessing the potential risks associated with the exploration and development of unconventional gas and oil, and the use of hydraulic fracturing to enhance its production, providing at all times, there is a robust regulatory regime which enables the risk to be reduced.

Yours sincerely

Contact details:

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References:

Royal Society report on fraccing in the UK

Independent report by the Royal Society and Institute of Engineers in the UK re shale gas production and fraccing.

http://royalsociety.org/policy/projects/shale-gas-extraction/report/

Australian Council of Learned Academies (ACOLA) "Engineering Energy: Unconventional Gas Production A Study of Shale Gas in Australia" Final Report.

http://www.appea.com.au/wp-content/uploads/2013/07/ACOLA-Final-Report-Engineering-Energy-June-2013.pdf