Final Fracking Inquiry presentation / submission.

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Introduction

Thank you for giving us this opportunity to once again present to the Inquiry. We'd like to start by acknowledging that we're meeting on the lands of Arrernte people and to recognise the strength of Arrernte culture, past and present, and the importance for all of us visitors to act in ways that support Arrernte people in keeping their culture strong.

Thank you for doing such a thorough job with your draft final report. We came to last night's community consultation session and found it very worthwhile to hear the broader context behind each section of the report, as well as the detail with which each section was written. There are many solid recommendations you have put forward and there are some we are concerned about and although we don't have time to cover them all in this short time slot we are happy to supply you with written feedback.

Just to remind you, last time we talked about our concerns around the:

- Economics of having a fracking industry in the Northern Territory; and
- Water security for people living in this arid zone.

Having read the draft final report, we want to once again comment on the lack of real economic benefit to the people of the NT in the development of an onshore shale gas industry in the NT. If the supposed benefits of fracking are dubious, why are we even contemplating introducing this industry, even with high levels of regulation to mitigate the risks? Why entertain the risks at all if there are no real benefits?

Our second (brief) point is that no matter how highly regulated the risks of any onshore unconventional shale gas industry might be, the industry will still be a contributor to global warming. And introducing a new industry that adds to our global warming emissions, instead of acting to reduce them, is simply no longer morally acceptable.

Finally, while we commend the Scientific Panel for the many solid recommendations you have put forward, from our reading of the draft final report it seems that there is essentially a 'loop hole' around exploration. We would like to stress that all the regulations need to be in place before exploration begins so they apply to both exploration as well as production.

We would just like to note that these three concerns are valid for the development of a fracking industry throughout the NT, or in just the Beetaloo Basin.

Point One: The Economic Impacts of a Potential Shale Gas Development in the Northern Territory

We believe there is no real economic benefit to the people of the NT in the development of an onshore shale gas industry in the NT.

The Inquiry notes that *"it is apparent that there is considerable uncertainty about the likely scale and rate of development of any shale gas industry in the NT if the moratorium is lifted*

by the Government" (Summary of the Draft Final Report, p. 13). This uncertainty is recognised by ACIL Allen in its economic assessment.

ACIL Allen's report (October 2017), states that there is "very high probability" that an unconventional gas industry would "fail to commercialise" in the NT ("Shale Calm" scenario). It also states there is "very low" or "low" probability of their highest production scenario ("Shale Gale" scenario).

Even in the low-probability Gale Scenario, ACIL estimate direct and indirect employment in the NT would be only 524 full time equivalent jobs in any year over a 25 year period. This represents just half of one percent of employment in the NT. Similarly, ACIL estimates that the Gale Scenario would see an increase in Territory Government revenue of $143.2 million per year, just 2% of budget revenue. However the scenarios that ACIL Allen see to be most likely, (high or very high probability) would increase Territory revenues by between zero and $29.1 million per year, a fraction of one percent.

ACIL's probability assessment echoes those of industry analysts who think it is unlikely unconventional gas development in the NT can be commercially viable given likely high costs of production and distance from markets.

Despite this rare consensus from economists that an unconventional gas industry in the NT would be low-probability and have little impact on employment or revenue, the Inquiry's Draft Report (December 2017), paints a very different picture. For example:

> *ACIL Allen's economic impact assessment modelling reports that lifting the moratorium on hydraulic fracturing in the NT will deliver tangible economic benefits in the form of increased income, output, employment and taxation revenue, and stronger population growth.* (p327)

In last night's presentation by Justice Pepper the estimates of ACIL Allen of jobs, population growth and income are all very small, even in the most developed scenario, over a 25 year period.

The Draft Report makes no mention of ACIL's assessment of the probability of its different modelled scenarios. ACIL's report makes it clear that these should be a key point raised in the Inquiry's final report. The recommendations in the draft report's section on "Economic Impacts" (section 13) assume an industry that is economically viable while it is clear that the Inquiry's own commissioned economic analysis by ACIL Allen, questions this.

Multiple media reports have misreported ACIL Allen's economic analyses, giving the impression that an unconventional gas industry could be an employer 26 times greater than ACIL's best-case assessment. In the politically charged atmosphere of gas policy these omissions and misinterpretations of ACIL's results make evidence-based policy even more difficult to achieve. Those of us who have prioritised our time to read the report and appendices to make submissions would be in the minority, but most Territorians would only know what is being said through the media. It is therefore of paramount importance that they are not being fed information that lacks all the details to put it into context.

From the points raised above, it is obvious that there are clear concerns about the economic benefits of fracking. The risks are too many and the potential benefits too uncertain. As we said in our last submission, the NTG is essentially gambling on an industry that is unable to provide a financially viable track record.

Point Two: Climate change

Our next point is that, in a period of increasing global temperatures, it makes no sense to continue to invest in an industry that uses fossil fuels and contributes to global warming and climate change.

The draft final report notes that:

> *"For any new onshore shale gas field in the NT, the Panel has assessed the risks to climate change associated with GHG emissions, including methane, and assessed that each of these risks, without any further mitigation, to be 'medium'. As each of the assessed risks is 'medium', further mitigation is required to achieve an acceptable level of risk. The decision on the extent of mitigation required has been guided by the principles of ESD, [environmentally sustainable development] while at the same time recognising that there are community concerns and lack of trust with industry and with the Government's ability to adequately manage and control industry…"*
> (Scientific Inquiry Into Hydraulic Fracturing In The Northern Territory - Draft Final Report, pg 219).

We are not convinced that the mitigation measures put forward by the Inquiry Panel are sufficient, for two reasons. Firstly because a number of them (such as recommendation 9.2 re: a code of practice for monitoring and reporting methane emissions and recommendation 9.3 which requests the baseline monitoring of methane concentrations for at least a year before the commencement of shale gas production) relate only to production and not to the exploration phase of a fracking industry. **This is a concerning omission.**

Secondly, these risks are thought by the Inquiry Panel to be reduced from medium to acceptable only if they are all implemented and all implemented in full. I return to the point made by the Inquiry Panel itself, that we are entrusting the task of managing risk reduction, to an industry that the community lacks trust in and to a Government that the community already doubts has the ability to adequately manage and control industry. I was part of the team that knocked on doors within the electorate of Braitling in 2016 and through personal experience and discussion at that time, there was strong evidence to support the Panel's statement *"that there are community concerns and lack of trust with industry and with the Government's ability to adequately manage and control industry"*. Not only were 89% of the neighbourhood opposed to fracking in the NT, the many discussions we had while door-knocking only reinforced the conclusions that the Inquiry Panel has come to.

Should these measures suggested by the Inquiry Panel not be taken-up by Government, or not be adhered to by the industry, the risks are:

- fugitive emissions from natural gas production in the NT are expected to be about 3% of Australia's Inventory methane emissions
- there is an, as yet unknowable amount of abnormal levels of fugitive methane emissions from any new shale gas industry in the NT
- GHG emissions from any new shale gas field (assumed to be 365 PJ/y) in the NT would contribute around 5% of Australian GHG emissions; and
- the assessed risk of fugitive methane emissions from decommissioned wells from any new onshore shale gas industry in the NT is assessed, without any further mitigation, as 'medium'.

These emissions are not isolated. In conjunction with other developments, they all contribute to global warming. I would like to know how these emissions, even if kept as low as possible, fit into Australia's commitments under the UN Paris Climate Agreement to reduce greenhouse gas emissions to 26-28% below 2005 levels by 2030.

We feel great alarm at the thought of global warming. We have a responsibility to act, for surely we will be questioned by our children and grandchildren about why we let this happen. We do not know what the world will become with global warming, but we are leaving these consequences to our children to bear. This does not sound like intergenerational equity to us.

The GHG emissions and associated risks of Climate Change cannot be considered in isolation. When considered in the bigger picture of Australia's total GHG emissions, and their part in the global picture, the risk is too high.

Point Three: Regulation required through the exploration phase

From our reading of the report, it seems that there is essentially a 'loop hole' around exploration. Exploration involves sinking wells and fracking for potential gas. Fracking for exploration is still fracking!

So, while we commend the Panel for its recommendations around well integrity (such as recommendations 5.3 and 5.4), we would like to stress that these regulations need to be for exploration as well as production wells. For example, recommendation 5.4 calls, in part, for "a process for periodically verifying well barrier integrity" but only "through the operational life of the well and immediately prior to abandonment". This is an example of where the Panel's suggested regulations must be deliberately strengthened for both exploration and production wells.

We would like to particularly point out that our concerns to only implement the stringent recommendations so cleverly appointed by this Inquiry to the production phase, which offers us no protection or confidence whilst the exploration phase can carry on business as usual, unregulated, is particularly felt in relation to the risks to water. These risks are very large to this community living in the arid zone and wholly dependent on groundwater.

The draft final report notes that:

> "*The Panel has assessed the risk that any onshore unconventional shale gas industry will use an excessive amount of groundwater, which could result in an unacceptable reduction in the amount of water available regionally for domestic use, use by other industries, and for the environment. … Accordingly, the Panel has recommended that a strategic regional environmental and baseline assessment (SREBA) be undertaken to provide more detailed information on the groundwater resources before any approvals are granted for shale gas production"* (Scientific Inquiry Into Hydraulic Fracturing In The Northern Territory - Draft Final Report, pg 120).

The recommendations that follow from this (recs 7.1 which requires companies to obtain water extraction licences under the Water Act; rec 7.4 which requires a strategic regional and environmental baseline assessment to be developed; and rec 7.11 which aims to reduce the risk of contamination of surface aquifers from on-site spills of wastewater), specifically refer only to the production phase of any onshore unconventional shale gas industry. Once again, we call on the Panel to strengthen these recommendations so that they cover the exploration phase, also.

We are concerned that the risks from this industry are too big. Although the Panel concludes that these risks are 'manageable' and that *"harm could be minimised to an*

acceptable level" (Summary Report, December 2017, pg. 50), if you combine the risk of an industry that is in decline as a result in the drop of world oil and gas prices, together with the pressure to make it economically viable, and we risk a repeat of the *Deepwater Horizon* oil spill in 2010 (https://en.wikipedia.org/wiki/Deepwater_Horizon_oil_spill). In the current environment in the oil/gas industry, in order to run a fracking operation judicially, it relies on the expertise of the people operating the machinery. As a result of the declining industry, there has been a large loss in skills and expertise and this poses a very large risk. It was a lack of skills combined with 'cost-cutting' that led to the Gulf of Mexico disaster (the Macondo blowout). The Panel are assuming Best Practice but this assumption is flawed under the current conditions of the industry (Anonymous, Feb 2018). As a long-time Seismologist and Geophysicist, Anonymous (2018), has seen the results of operations going into 'cost-cutting' mode: *"when the economics are this marginal, cost-cutting occurs around 'skimping' on skilled expertise and this is courting disaster"*.

With the collapse of the world gas price, operations try to save money in many ways thus significantly increasing the risks. Anonymous (2018), is extremely concerned that where the Panel calculates the risk as 'medium/acceptable', empirical evidence suggests the risk is significantly higher. We can't risk another disaster such as the Macondo one, as a result of cost-cutting. In the case of Hydraulic Fracturing in the NT, the same issue as Macondo had with poor cement well capping would result in massive fugitive Methane emissions. So we implore the Panel to consider their calculation of risk in their final summary.

Conclusion

We thank the Panel for once again giving us the opportunity to participate in this Inquiry. Chief Minister Michael Gunner must stand firm against pressures to open the Territory to an onshore unconventional shale gas industry and, instead, must act to ban fracking to protect all Territorians and our natural environment into the future.

References

Anonymous, *"Review of Draft Final Report from the Scientific Inquiry into Hydraulic Fracturing in the NT"*. Interview with Senior Geophysicist and Seismologist, 05/02/2018.

Acil Allen Consulting, *Final Report to: "Scientific Inquiry Into Hydraulic Fracturing In The Northern Territory. The Economic Impacts of a potential Shale Gas Development in the Northern Territory"*, October 2017. (Appendix 16)

"Deepwater Horizon Oil Spill" (February 2018). Wikipedia: The Free Encyclopedia, Wikimedia Foundation, viewed: 11/02/2018, https://en.wikipedia.org/wiki/Deepwater_Horizon_oil_spill

Scientific Inquiry into Hydraulic Fracturing in the Northern Territory, *"Summary of the Draft Final Report"*, December 2017.

Scientific Inquiry into Hydraulic Fracturing in the Northern Territory, *"Draft Final Report"*, December 2017.