

## fracking inquiry

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**From:** Lauren Mellor [REDACTED]  
**Sent:** Saturday, 24 February 2018 2:14 PM  
**To:** fracking inquiry  
**Subject:** Submission to Inquiry  
**Attachments:** Submission to NT Inquiry into Hydraulic Fracturing 2018.pdf

To whom it may concern;

Please find attached a copy of the written submission on behalf of the Territory Frack-free Alliance to accompany the Tennant Creek oral submission.

regards,  
Lauren

# **SUBMISSION TO NT INQUIRY INTO HYDRAULIC FRACTURING**

**24 FEBRUARY 2018**

**Prepared on behalf of the Territory Frack-free Alliance by Lauren Mellor.**

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Thank you to the Inquiry Panel for accepting this written submission, alongside our presentation to the Panel in Tennant Creek.

This submission is prepared on behalf of the Territory frack-free Alliance, a network of community groups formally established in 2013 in response to growing community concerns regarding potential fracking gasfields across urban, regional and remote regions of the NT.

Our Alliance has member groups in all regions targeted for gasfield exploration and development including Arnhem Land, the Roper River region, Katherine, Coomalie, the Barkly, Gulf of Carpentaria and Central Australia.

I would also like to acknowledge and pay respect to the families of three significant community leaders who we have lost from our movement for a frack-free Territory over the course of this Inquiry.

Kumentjaye Eather of Arnhem Land, Kumentjaye Watson and Kumentjaye Kingsley of the Roper River region. Each given given powerful testimony to the Panel, provided submissions and encouraged their people to speak their views on fracking at consultation meetings over the last year and a half and for many years before that.

We are saddened to see the cost to our communities from the fracking industry before it is even yet fully here, with our youth and Elders forced to spend their last days not with family, but fighting again, for country, to be heard about the real aspirations they had for their communities, not the future being pushed onto them by this dangerous industry.

I have spent the last twelve years working alongside communities in the Territory impacted by invasive mining operations. I have worked with peak non-government environmental organisations, helped design mining rehabilitation and closure plans, worked to hold industry to account for the promises of mutual benefit it frequently expounds, and assisted with monitoring and reporting the damage that goes unprosecuted to the Territory and Federal Governments.

Over this time I have witnessed first-hand the corrosive effect that the extractives giants have on our democracy, and the impunity with which they have been allowed to act over the course of successive governments.

I provide this submission to the Inquiry today because, in our view, the scale of potential disturbance across the landscape from gasfield development, the sheer number of gas wells proposed, and the potential for irreversible harm to our water resources through fracking operations presents a scale of risk to our land, water, climate and communities previously unseen in the Northern Territory.

### **Maintain fracking moratorium/no exploration before studies complete**

Numerous stakeholders including public health, fishing and environment peak bodies have raised concerns since the Draft Final Report's release that, in its current form, recommendations would allow for the continuation of intensive gas exploration *alongside* the collection of what has been identified as critical baseline data and regional risk assessments to identify no go zones for gas development.

We share that concern in relation to the timing of risk assessments and collection of baseline data with regard to the following recommendations, and call for the following seven recommendations to be enacted and completed prior to any further exploration fracking activities occurring:

*Recommendation 7.1 Water Act be amended to require gas companies to obtain water extraction licences under that Act. That the Government introduce a charge on water in the NT for all onshore shale gas activities.*

*Recommendation 7.4 That a strategic regional environmental and baseline assessment (SREBA), including a regional groundwater model.*

*Recommendation 9.2 That a code of practice be developed and implemented for the ongoing monitoring, detection and reporting of methane emissions from onshore shale gas fields and wells.*

*Recommendation 10.1 That formal site or regional-specific Human Health Risk Assessment (HHRA) reports be prepared and approved.*

*Recommendation 14.1 That the Government design and implement a full cost recovery system for the regulation of any onshore shale gas industry.*

*Recommendation 14.16 Legislation to regulate seismic surveys, drilling, hydraulic fracturing, and well abandonment.*

*Recommendation 15.1 That a strategic regional environmental and baseline assessment (SREBA) be undertaken.*

We urge the Panel to reconsider its recommendations in regard to the staging of these assessments and to be clear in its language around the requirements for completion *prior to* any further exploration commencing.

Significant knowledge gaps still exist in our understanding of how gasfield exploration and development could impact our rivers, springs, floodplains, aquifers and catchment areas, and associated stock and drinking water supplies.

The report has recommended further studies be undertaken and baseline data collected but we need to be able to measure what's there etc prior to, *not alongside*, largescale landclearing for pads, waste ponds and pipelines, the transportation and introduction of fracking chemicals to sites.

Key stakeholders to the inquiry do not want to see another frack well built, another pad cleared, another waste water pond constructed until these critical assessments of our unique landscapes and water resources are complete.

To allow these two activities to proceed alongside each other, instead of a clear requirement for baselines and regional studies to be completed first risks further landholder and community conflict with the gas fracking industry as it attempts to roll its frack rigs into those regions right through the loopholes the report in its current form allows for.

### **Regulatory regime failures provide no confidence in fracking oversight.**

The Panel has correctly identified the deep level of distrust that exists with regard to the capacity and willingness of successive NT governments to hold the extractive industries to account; under either the existing or any future proposed regulatory framework.

The need for law reform in this area is well known by government. Most of the pieces of environmental legislation in the Territory have been the subject of submissions and calls for reform over a very long period. These calls for reform have been met with inaction and, as a result, threats to our environment, rivers and coasts continues to increase with every mine, port, waste dump and petroleum exploration approval.

The reason a vast majority of submissions and participants to the fracking inquiry called for a fracking ban, and not a revised regulatory framework, is precisely because of the lack of trust and action witnessed from successive governments and the extractive industry over time.

Regulatory framework Option 2 as proposed in the draft final report is intended to offer a dedicated shale gas regulatory regime proposal for consideration by the NT Government. The proposal is largely based on two examples of dedicated oil and gas regulatory regimes, the Alberta Energy Regulator and British Columbia Oil and Gas Commission.

But, despite the highly specialised nature of its regulatory operations with regard to monitoring and compliance enforcement of oil and gas extractive activities, both these two regulatory bodies oversee a myriad of unresolved environmental, health and safety risks and incidents.

For example, one recent release of an unpublished internal audit report by the Alberta Energy Regulator<sup>1</sup> found that 10% of the region's abandoned gas wells were leaking methane.

The 33-page study found that '36 of the abandoned wells were leaking methane. Nine of those wells were leaking at a level that Alberta Health says poses a risk of neurological damage to nearby residents.'

'Six of them were leaking methane at more than 10,000 parts per million (ppm), a level deemed "life threatening" by Alberta Health.'<sup>2</sup>

A report for Natural Resources Canada has described methane leakage from active or abandoned wells as "a serious threat to the environment and public safety" with the risk of "irreversible contamination of freshwater aquifers, accumulation of explosive gases within and around residences and other structures and contribution to greenhouse gases."<sup>3</sup>

Researchers estimate that seven to 19 per cent of producing wells completed between 2005 and 2007 have been affected by gas migration along the casing annulus, while nine to 28 per cent showed gas leakage through the surface casing. The annulus is the space between the pipe and drilled rock.<sup>4</sup>

A 2016 study completed for Natural Resources Canada explained that "abandoned oil and gas wells may develop wellbore leakage either over time or relatively soon after abandonment" due to poor cement jobs or poor regulation of the plugging process.

Despite these problems, Alberta is considered to have among the most detailed and comprehensive reporting requirements for leaking wells out of seven major oil and gas jurisdictions in North America.

It is our view that even with best regulatory framework, we must have reform of a political culture to ensure that government will take responsibility for holding large resource companies to account.

The Territory's history in this regard doesn't lend confidence to anyone looking for a regulatory solution to the fracking industry's myriad risks.

A brief summary is provided below of recent examples in which regulators and NT Government agencies have failed to apply sanctions or pursue prosecutions to extractive companies following significant environmental and safety incidents:

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<sup>1</sup> Source: <https://theyee.ca/News/2017/06/28/Energy-Industry-Legacy/>

<sup>2</sup> 2015 Alberta Health report titled "Methane from Leaking Abandoned Wells: Health and Safety Concerns". Unpublished online. Referenced at: <https://theyee.ca/News/2017/06/28/Energy-Industry-Legacy/>

<sup>3</sup> <https://csgm.ca/wp-content/uploads/2016/06/FCRL-TRM-Wellbore-Leakage-Dring-Completions-June-6-2016.pdf>

<sup>4</sup> [http://onlinelibrary.wiley.com/doi/10.1002/2016WR018686/epdf?r3\\_referer=wol&tracking\\_action=preview\\_click&show\\_checkout=1&purchase\\_referrer=www.google.ca&purchase\\_site\\_license](http://onlinelibrary.wiley.com/doi/10.1002/2016WR018686/epdf?r3_referer=wol&tracking_action=preview_click&show_checkout=1&purchase_referrer=www.google.ca&purchase_site_license)

1/ Glencore's McArthur River Mine in the Gulf of Carpentaria has been responsible for a litany of operational breaches over its 20 year operational lifetime. These include a tailings dam collapse, regular spills and discharges of heavy metals into the McArthur River, millions of tonnes of spontaneously combusting waste rock due to mishandling of stockpile characterisation<sup>5</sup>. Despite this, the mine operator has only two registered financial penalties recorded; one for a smoke plume release at \$700, and once for a large a diesel spill.

2/ Energy Resources of Australia's Ranger Uranium Mine, operating within the bounds of the World Heritage Listed Kakadu National Park. In 2013 the company was responsible for the collapse of a leach tank, releasing volumes of highly acidic and radioactive slurry on site. The incident was found to have potentially risked causing fatalities to workers who were required to patch metal fatigue in the leach tank just moments before its collapse. A three year investigation by the NT Department of Mines and collaborating agencies found in 2016 it was not in the public interest to prosecute. The Department refused to release its statement of reasons for the decision.

3/ Western Desert Resources in the Roper River region. In 2015 built a several hundred kilometre illegal haulage road to its loading facility in the Gulf of Carpentaria. The mine was only operational for six months before collapsing due to bankruptcy. Its clean up responsibilities are now the remit of the NT Government. No prosecution for the haulage road was ever made.

4/ Redbank copper mine<sup>6</sup> in the Gulf of Carpentaria, with an estimated clean-up bill in the range of \$1 billion, was facing 26 charges for water pollution offences with potential penalties in the millions of dollars. In 2016 the EPA decided to drop the charges or make comment on its rationale for doing so.

5/ Another example of failed Northern Territory Government regulation is the disastrous Montara Oil Spill in 2009. This saw oil gushing into the Timor sea north of Darwin lasting 70 days. The effects of that spill are still being felt. The Montara Commission of Inquiry's findings were damning of the Northern Territory Regulator, finding that it didn't fulfil its obligations, was too close to the proponent, and had inadequate expertise to regulate the operation.

It is the extractive industry's routine refusal to operate within the law, coupled with successive Territory government's failure to hold them to account either on environmental outcomes, or the payment of taxes and royalties on the publicly-owned resources it exploits, that has seen it lose social licence in the community.

This can only be rebuilt over time, and with significant financial and regulatory reform and cultural change to increase transparency and accountability at all levels of compliance and government.

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<sup>5</sup> <http://www.abc.net.au/radionational/programs/backgroundbriefing/mcarthur-river-mine/7163300>

<sup>6</sup> <http://www.abc.net.au/news/2016-05-16/redbank-copper-mine-off-the-hook-as-nt-epa-drops-charges/7419566>

We urge the Panel to ensure that its final report provides no justification for exploration to proceed further until the regulatory reforms are implemented, and the studies required are complete.

Trust in any new regulatory system and its enforcement needs to be built over time and the work of this panel in offering improvements to the system stands to be lost by allowing a headlong jump into exploration before these conditions are met.

### **Fracking Industrial jobs and economic analysis**

The Draft Final Report on page 320, section 13.5 features a comparison between gas industry commissioned economic report on a Territory shale gas industry, and that of the Inquiry's own commissioned research provided by ACIL Allen. We agree with the Panels assessment that 'ACIL Allen assumptions and modelling represent a much more realistic approach to estimating the economic impacts of any onshore shale gas industry in the NT.'

This clear representation on page 320 of the full time equivalent additional number of jobs in 2043 compared to the base case now, shows that there will be somewhere between 80.1 to 558.1 additional jobs created in scenarios where the industry is commercially successful.

It should be emphasised that ACIL's report gave "very high" probability to commercial failure, and a zero jobs result.<sup>7</sup>

The Inquiry's draft report does not reference ACIL's "probability matrix", leaving its economic analysis open to continued misrepresentation by the gas industry and media commentators. The final report should give the risk matrix prominence in its final report, rather than relegation to an appendix.

Regardless of the ACIL scenario selected, their assessment is a far cry from the 4195 to 6321 additional jobs that the previous APPEA study had been spruiking to Territorians.

We are grateful to see that the claims of thousands of jobs and significant revenue streams that the fracking industry has been relying on to muddy the waters on its economic case have been thoroughly debunked by this assessment of the fracking industry's potential contribution to the economy.

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<sup>7</sup> The Inquiry's commissioned economic analysis found 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).

Of further consideration is the fact that the fracking industry has a proven track record of job displacement from other sectors. A fact which is only partially analysed in the economic impacts section of the draft final report.

Numerous reports analysing the economic and employment impacts of the development of unconventional gas in Queensland however show agricultural industries were among the hardest hit, with a loss of 1.8 agricultural jobs for every new gas job created. Another study by the CSIRO's GISERA found 'job spillovers into non-mining employment are negligible'<sup>8</sup>

Again, contrary to the promises of infrastructure investment made by the fracking industry in the NT to date, a UQ survey of local stakeholders in gas fields found that every other stakeholder group including landholders, local governments and businesses bar the gas sector found built, financial, social, human and natural capital were left worse off as a result of gas and mining development.<sup>9</sup>

Other sectors including tourism, pastoral and farming and fishing rightly continue to raise their concerns with this Inquiry and the NT Government that the fracking industry poses a risk to employment, existing infrastructure and services and investment in these established, and widely supported industry sectors.

### **Unacceptable risks to our climate from shale gasfield development in the NT**

The draft final report's conclusions on the level of risk that shale gasfields pose as a driver of climate change remain concerning.

The report concludes that just one gasfield, of approximately 1000 wells in the Beetaloo, would add an additional 5% to Australia's overall national emissions.

This should be enough to raise alarm bells for any government purporting to take seriously the very real and unfolding impacts of climate change.

The draft final report discusses estimated methane emissions of an additional 5% on top of Australia's already dangerously high national emissions as a 'medium risk of low consequence' and does so by comparing it to 0.02% of global emissions.

A 5% increase in Australia's emissions from a single gasfield is a large and unacceptable increase and we disagree with the characterisation of it as having low consequence. Such an increase is completely inconsistent with Australia's carbon budget and our commitments to reduce emissions under the UN Paris climate agreement.

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<sup>8</sup> Local economic impacts of an unconventional energy boom: the coal seam gas industry in Australia. Report to the Gas Industry Social and Environmental Research Alliance (GISERA). June 2013. CSIRO, Canberra.

<sup>9</sup> Everingham, J, Collins, N, Rodriguez, D, Cavaye, J, Vink, S, Rifkin, W & Baumgartl, T (2013) Energy resources from the food bowl: an uneasy co-existence. Identifying and managing cumulative impacts of mining and agriculture. Project report, CSRM, The University of Queensland: Brisbane.



Given the vulnerability of tropical regions to the impacts of climate change, the Territory has an even greater incentive to want to quickly ramp down emissions, not add to a warming world's problems.

The cumulative risk of adding a further 5% to Australia's national emissions every year has not been assessed – not for current generations of young Territorians who stand to lose most from the poor decisions we make for our climate today.

The Panel's climate modelling and conclusions must be peer reviewed by appropriately credentialed climatologists to gain a better understanding of the considerable risks that shale gas development pose to the climate.

## **Conclusion**

The contamination legacy of fracking, everywhere it has been trialled, is comparable only to the days of profound chemical and industrial disasters like that of DDT or asbestos.

No collective risk, the scale of which would be required by gasfield development in the NT, is worth the meagre financial gain this Inquiry's report has outlined would accrue to the NT Government and Territory public should fracking be allowed to proceed.

The fundamental flaw that has constrained this Inquiry through the Terms of Reference is the requirement to apply the consistent use of the highly subjective and undefined term 'acceptable risk' in an objective way.

What is meant when the Panel conclude risk can be mitigated to an acceptable level? Is that there is only one contaminated aquifer? A 1% increase in premature births? Is it a 5% increase in Australia's contribution to global warming? Is it a 2% increase in road fatalities from increased industrial traffic?

This Inquiry, nor the NT Government doesn't get to decide what risk is acceptable. That is a question for the Territory's people to decide; if this Inquiry has done anything it is to show that that decision has clearly been made by the overwhelming numbers of Territorians who have participated in this Inquiry.

The final report needs to acknowledge the overwhelming support for a ban if it is to genuinely reflect the aspirations of all those communities that appeared before it, wrote submissions and attended consultations to speak or vote near unanimously for a ban.

Thankfully, the Territory Frack-free Alliance are not similarly constricted by the Inquiry's Terms of Reference in our continued advocacy for a permanent ban on fracking.