

Dear Inquiry Panel,

I oppose fracking in Western Australia.

- Unconventional gas mining and fracking is harmful to health. Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses.
- Water and chemical use and wastewater production from fracking places WA's vital water resources at risk from contamination and depletion. Our state is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. Our land and environment are under growing pressure from a lack of fresh water. We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry.
- Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. This creates stress and leaves individuals and communities worried about their financial security and their ability to farm their land. The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation.
- Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy.
- Unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders.
- Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change.

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.

Additional comments to the Lock the Gate Submission

These comments have been displayed exactly as they were provided. Six comments have been removed as they were crude, vulgar or used abusive language.

I vehemently oppose fracking in Western Australia.

There is no doubt that fracking has caused serious environmental issues and significant public health problems for those living near unconventional gas fields in Queensland and in the USA. The ill effects of fracking continue to emerge and the experience of the USA should serve as a dire warning for the future we can expect if we do not put a permanent stop to fracking in Western Australia.

Health ailments including respiratory ailments, nose throat and eye irritations and neurological illnesses have been connected to fracking practices. It is a matter of public health and it would be unconscionable to allow fracking to continue knowing it will adversely impact the wellbeing of Western Australians.

Additionally, the significant environmental cost cannot be overlooked or ignored. Chemicals used in fracking puts our water resources at risk of contamination. Our ground water is a valuable resource in Western Australia and we must task ourselves with the responsibility and the foresight to protect our precious natural resources that are already under threat as a result of global warming.

I strongly oppose fracking in Western Australia and all of Australia. It's not hard to see that all the problems outweigh the positive outcomes with this practice. As a first world country we should be leading the rest of the world and setting an example with how to progress forward with sustainable and safe practices. Can we take a minute to think about what is actually going on around this planet for one second, I ask you to look at this issue not as a committee member but as a human being, we have so much pollution and devastation being created every minute across the globe and I sincerely believe that adding to it with another operation based on the pursuit of money is a shallow and sad exercise. Is this the world we want to leave behind for our children and future generations? We have one planet and once it's dead we are too.

The negative impact on the Western Australian environment caused by fracking will filter through to so many industries. It's time to create some honourably history and make a stand for Western Australia, to not only help preserve our tourism industry that stands on the back of our unique and pristine environment, but also to show the world how much we value our way of life and why we want you to visit the best State/Territory in the best country in the world.

State and federal investment should be made into renewable, sustainable energy that protects our environment and for the future of Australia.

I live in Bunbury, in the south west of Western Australia. We are facing the threat of fracking across the south west region where our local economy relies on agriculture, especially dairy and beef, as well as wine and tourism. We have seen the effects that fracking has had on rural farming in other parts of Australia and the way it destroys the natural environment. We oppose the gas industry hydraulic fracturing in protection of our communities livelihoods, their health and safety of our water. We know that fracking will change the landscape of our region and towns for the worst. The impact it will have on the natural environment is irreversible. People here do not want to see fracking happening in our local area, or anywhere else as it leads to large deliberate and fugitive emissions of methane, adding to climate change.

I write to you to express my strong opposition of fracking in Western Australia.

These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses. We do not want to cause these problems here in Western Australia.

- we live in one of the most places on the planet and have some of the most pristine waterways on earth. Water and chemical use and wastewater production from fracking places WA's vital water resources at risk from contamination and depletion.
- The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation. Having spent time in remote and very remote communities across our state, and having had the honour of being at the 2016 Yule River meet, I find this particularly distressing.

I support fracking in Western Australia if properly regulated and managed – and based on sound engineering and scientific facts.

In support of the communities of the Kimberly I oppose fracking in Western Australia.

The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that are no longer strategically vital as they can, and have been in many places, replaced by renewable forms of energy generation.

We need clean water in this BUG COYNTEY if ours. Please dont kill our future

I oppose hydraulic fracture stimulation “fracking” in Western Australia.

Fracking and unconventional gas mining have many negative impacts to both the environment and human health.

Fracking involves large volume water usage combined with chemicals in the fracking fluid, statistics from the Environmental Protection Agency ‘EPA’ in American data analysed 692 unique ingredients. In over 65% of fracks these included methanol, hydrochloric acid and hydro treated light petroleum distillates. Exposure to fracking fluid has been linked to respiratory ailments, nose throat and eye irritation, neurological illnesses and birth defects.

The same set of EPA statistics indicate that low volume hydraulic fracking can require between 20-80,000 gallons (75,708 – 302,832 litres) of water and a coal bed methane reservoir frack requires between 50-350,000 gallons (189,270 – 1,324,894 litres) of water.

The chemical and wastewater combination is then supposed to be extracted after the fracking. The USA & Queensland experiences would indicate this is not fully effective and that there is seepage to other water sources, hence the not uncommon images of methane flares and degradation of animal and plant life nearby.

Our state is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. Our land and environment are under growing pressure from a lack of fresh water and we cannot afford to put groundwater at risk for an unnecessary industry. Landholders and Traditional Owners don’t have the right to refuse access to oil and gas companies in WA. This creates stress and has led to the suicide of at least one farmer in Queensland. The Queensland experience has also seen reduced farm productivity and land values. The gas industry should not be allowed to treat landholders and landowners in this manner. These rights that oil and gas companies have existed prior to fracking, and are now being used and abused in a manner that affects the health and livelihood of individuals and communities.

Fracking seems to be the desires of industry being put ahead of the needs of citizens. Food, which is a non-event without water, and shelter are needs, gas and access to ‘cheap’ power are wants. The power is in fact not cheap, it is just the method of calculation is considering a current day dollar value of gas cost, and disregarding entirely the long term health and environmental costs. To summarise the benefit of fracking seems to be giving oil and gas companies the access to more gas to sell; which they may not necessarily sell to Australians.

The risks are –

Water pollution

Air pollution

Noise and light pollution for those in closer proximity

Global warming

Inducing drought like situation

Health problems from toxic chemical exposure

Allowing energy to be cheap inhibits reduced energy consumption and investment in better alternatives.

Source of statistics on fracking water use & chemical components – Analysis of Hydraulic Fracturing Fluid Data from the FracFocus Chemical Disclosure Registry 1.0 U.S. Environmental Protection Agency Office of Research and Development Washington DC

https://www.epa.gov/sites/production/files/201503/documents/fracfocus_analysis_report_and_appendices_final_032015_508_0.pdf

I would appreciate your consideration of my humble but very meaningful view of unconventional gas extraction in Western Australia.

We will be moving to Harvey in the near future and are very aware of the impact fracking has had on communities world wide. The State Government has an obligation to its constituents and needs to act on behalf of them in this matter. Governments must take strong action to recognize that the planet will not survive policies based on economics which excludes the 4 main criteria that ensures the survival of all living things. Without incorporating the inclusion of clean air, clean drinking water, uncontaminated soil and free energy from the sun, all economic decisions are doomed to failure with often catastrophic consequences to the planet. This view I have extracted from an address by David Suzuki, award-winning geneticist and broadcaster to employees of Rio Tinto some years ago.

I was fortunate enough to be able to attend the Perth meeting on Wednesday 28 February 2018 at 12:30pm . The information provided by the people at the table was extremely well researched and presented in a most professional manner. The Chair of the Panel Dr Tom Hatton sat at this table for the duration of the allocated time and it seemed that he like me was impressed with the depth of the presentations given on the day.

My main concern, and I asked this question on the day, is why the need for unconventional gas extraction would be necessary at all in this state as when we have the Karratha LNG plant 1,260km north of Perth, one of the largest in the country, producing around 12 million tons of LNG a year for the Japanese and South Korean markets and also supplying 65% of the gas required by the Western Australian domestic market. My understanding is that new contracts have been granted to continue supply until at least 2030. Perhaps increasing the Western Australian domestic market could be considered to avoid unconventional gas extraction. My submission is short and not that scientific but I believe the above issues are extremely relevant and worthy of your consideration. I thank you for the opportunity to participate in this very important process.

I vehemently oppose fracking in Western Australia.
Unconventional gas mining and fracking is proven to be harmful to human health and the environment.

I oppose fracking in any part of Western Australia.

P.S. The money and resources spent on fracking and fossil fuel industries including fossil fuel based energy, could be spent on developing skills, technology and infrastructure to such a level that we could be completely free of the need for fossil fuel based energy AND we could be exporting the technology, expertise, and infrastructure to the rest of the world. Why wouldn't you grab the opportunity to lead the way in the world in such an important technology. Become world leaders again, retrain mining and energy workers, and revitalise our struggling manufacturing sector regardless of the effects of climate change. Build a cleaner world and a more prosperous Australia by future proofing our energy industry. And rebuild pride in Australia as a world leader in this vital industry. There is no down side. Why struggle against the tide, embrace it and excel like we we used to in so many areas in our history.

We should already be world leaders in renewable technology, useage and manufacturing given our climate, Intelligence, capability, especially as we began by leading the world in solar technology. We should have made it economical and compelling before it was perceived to be necessary but we lacked the political vision. We had the coal why encourage the world not to use it. So incredibly shortsighted and inward looking, no world vision.

Fracking is reckless gambling with the lives of the populace. There is so much to suggest that it causes irreversible harm that I would be loath to recommend it even in the most remote of areas.

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia. Please take a stand for the common good.

MY PERSONAL SUBMISSION

My name is ALAN IVEMY and I am a 77 year old retiree.

I obtained an honours BSc degree in Agriculture at Nottingham University and followed that with a PhD in Plant Physiology at Southampton University.

Since 1966 my employments have ranged from Irrigation Agronomy in Botswana through large scale irrigation equipment manufacture to broad acre farming in Western Australia. Subsequently I developed a system to culture microscopic algae in brine ponds to produce Pharmaceutical chemicals and latterly to developing and operating a successful business to manufacture and market a range of equipment to automatically sanitise fresh-water swimming pools.

These experiences make me very nervous about the claims by mining companies that they are able to fracture subterranean strata by hydraulic ramming and keep these installations from leaking. Toxic hydraulic ramming fluids will create fractures in many places – not just at the sites targeted.

This leads me to what I perceive to be the critical disadvantage of the whole technique — viz. the vertical perforation and surrounding fracturing of water-bearing strata — the aquifers. Once the aquifer integrity has been lost its repair is well nigh impossible ! Poisonous chemicals and high-pressure gases will be enabled to penetrate the aquifers and further to permit higher and lower aquifers to flow to and from each other. This will likely destroy the usefulness of these aquifers for the supply of fresh water to farms etc above — and for all time !!

AUSTRALIA'S PRICELESS WATER RESERVES

1 We are incredibly lucky to be living in this marvellous land. 2 We have enormous space. 3 We have incredible food production capabilities – way beyond our immediate needs. 4 We have abundant sunshine energy. 5 We have most of the minerals in the periodic table. 6 We could

manufacture any thing that humans need (or even want).

BUT:

WE do not have enough water to endlessly unlock these riches. Right now surface water supplies are being fought over in Queensland / New South Wales border regions as big Chinese/Japanese cotton producers in Queensland dam rivers thereby starving New South Wales farmers as an example.

One thing we ought not to allow is having mining giants from around the world to somehow cajole our politicians into letting them use gigantic volumes of our precious surface waters to extract oil and gas. It is becoming less and less acceptable around the planet to burn these carbon-rich fuels just to produce electricity.

Apart from the criminal use of fresh water, my greatest worry at this time is that the techniques being planned to release the underground gas reserves are far more risky in terms of disruption and destruction of the aquifers than the investors, engineers and their political backers care to admit.

Aquifers are not like surface water supplies. They are 3-dimensional, so when punctures are made through them the water-flows that take place into and out from them are far from predictable. To allow the fracturing of various gas-bearing strata above and below such aquifers is, in my opinion, grossly irresponsible. Based on the data, pictures and abundant anecdotal evidence so far published, we as responsible Australians must not tolerate this fracking technology to release the carbon-rich energy products to be burnt/oxidised simply to produce electricity.

Solar energy is abundant, endless and non-polluting.

NB: For support in these matters I wish to direct your attention to an exhaustive compendium of scientific research papers relating to the risks and outcomes of certain practices involved in hydraulic fracturing which has been assembled by Bryan Whan for the Lock The Gate Alliance.

The environment cannot cope with being plundered and destroyed. The air, sea and land are being desecrated – all in the ‘desire’ for money. But – you can't eat/drink money. The earth is being poisoned, the skies are being polluted, people are being contaminated by all sorts of unknown chemicals.

I oppose fracking in Western Australia and Australia in general. I agree with the arguments given below, and implore you protect the citizens and environment of WA by banning fracking.

We are crazy to even think of anything that poses the faintest threat to our water here in this dry dry country. Anything that is likely to poison it, to reduce the underground reserves, to lower the water table for farmers producing our food. What happens to the poison produced water in holding tanks when there is flooding etc. This is madness. I believe the people who have seen the results of this first hand rather than the companies making millions out of the product.

Fracked gas was ment to be a bridging gap source of energy till renewables had taken over. Instead it has become a business in its own right with most of the negative qualities of other fossil fuels. Henne I totally oppose fracking in Western Australia.

I oppose fracking in Western Australia. In addition to all of the points outlined below, we must consider haw we can maximise renewable energy options in order to avoid contributing further to the climate change crisis. This is the future of our planet, we don't have another home besides this one.

- Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change. 5% of all wells leak the after completion of installation and 30% leak during production. This risk is not insignificant. After exhaustion of the energy source the well remains in place, it cannot be re-vegetated as the polluted water is still underground with significant potential impact on the aquifers and natural ecosystems in the area and further away.

- Hydraulic fracturing does not meet the precautionary principle of the Environmental Protection Act and international law. This principle has four vital components: taking preventive action in the face of uncertainty; shifting the burden of proof to the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making.

- Renewable energy is available to produce enough energy to replace any energy extracted through this uncertain method. Hydraulic fracturing is an energy extraction that only provides intermediate energy, it is not able to sustain energy production in the long term and entails serious risks for the environment and our community. We do not need it. I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia. The precautionary principle must prevail.

I support fracking in Western Australia.
99 percent of the arguments against fracking apply to coal seam gas extraction at shallow depth. The fracking in the Kimberley is of shales at many times such depth.
Production of oil from unconventional means such as fracking is the future for this vital commodity and it is driving American vitality in the global sector.
I urge the inquiry to make a recommendation to permanently allow fracking and all unconventional gas mining in Western Australia.

I oppose fracking in Western Australia. I also oppose fracking across all of Australia.
I cannot understand how governments can allow this given the evidence of permanent damage caused to our water supplies (the water we drink!) and environment. We may think we have a lot of land in this country, even though the fracking is often done near the places we live (eg Queensland) . We will never have a chance to reverse the damage once it's been done. Think about the legacy we are leaving our grandchildren

After hearing how the public enquiry session in Broome was structured and how industry people flown up from perth took the available spots that community members should have got, I have my doubts that the government really wants to do a proper inquiry! Please convince me otherwise! Until now I was under the impression Labor government is better than liberal but at the moment I'm not sure at all!

When there is no doubt that this sort of mining method will create health issues and contaminate water supplies, I cannot understand why my government would even consider allowing this to go ahead!

There are other forms of clean energy to invest in and I see this as yet another slap in the face to individuals in favour of large mining companies in it solely for the dollar.

Our water supplies are already contaminated and yet our government want to further endanger this.

And what of the landholders and Traditional Owners of this precious land, do they have no say? This type of mining will jeopardise the whole region. The Kimberley is such an unique and untouched area .. please leave it this way!

I oppose fracking in Western Australia. I do not beleive that there is justification to risk the health of our people and our environment for a resource that will mostly be sold overseas and is not in under supply in this country.

I have seen the track record of this industry and the reality is not good, with the industries own statistics showing 100% eventual failure of wells. It is unbearably clear that this is an industry that we cannot trust, or that we can absolutely trust will fail us.

I am terrified when I am aware of the atrocious scar on our land that will be created for near no benefit, except to the hands of greedy overseas companies that will take their royalties back to their own countries.

- There is ample evidence of the risk of physical harm and future disease

Please plan for the future generations so they can enjoy a healthy environment.

Please don't allow fracking and risk people's health. There are enough health issues in the Kimberley already. Please don't make it worse. Help us make it better.

Whilst the following points are provided in general to those of us who want to express our opposition, they are exactly the points I want to make to voice my concerns.

In particular I want to reiterate my fear for our water supply. One of the driest places on earth, and governments who are tasked with caring for the environment and its people, are prepared to risk everything by this insanity.

My concern also goes to landholders who have invested countless time and money in this country for generations, have been stripped of their rights to protect their livelihoods and families. This is wrong!

I oppose fracking in Western Australia absolutely. I have just moved from Victoria where a fracking ban is in place and I closely followed the debate over the past few years and it was telling that the farming community – traditionally conservative – spoke in one voice with the Greens to support the ban.

The evidence is unequivocal. Fracking is damaging to the environment, to water supplies and to the health of humans and animals

States in the USA where fracking began have now banned it. Towns have had their drinking water permanently contaminated. In a few States earthquakes have increased from two or three per year to several per day.

In Australia, the evidence from Queensland is damning. The Condamine River can be set alight in places due to leaks of flammable and toxic gases escaping through fissures caused by fracking. There are numerous stories of farmers and people living near to fracking operations which provide evidence for the many negative consequences of this dangerous practice. Of course the mining industry is flexing its muscles to protect its profits. But WHAT DOES IT PROFIT A STATE IF ITS PEOPLE ARE POISONED AND ITS LAND PERMANENTLY CONTAMINATED FOR A SMALL MONETARY RETURN TO THE STATE COFFERS AND HUGE PROFITS TO MINING COMPANIES WHICH WILL SIMPLY MOVE ON, TAKING NO RESPONSIBILITY FOR THE DESTRUCTION THEY LEAVE BEHIND.

WA must say NO TO FRACKING. The cost is simply unaffordable. As political decision makers, PLEASE govern for the people and the future- for the children of generations to come. Resist the pressure that will inevitably be brought to bear. This is not about you personally or about political success – your decision has life and death consequences
See below for further relevant points.

It does not makes any sense to risk so much environmentally when there are many other safer ways to make power.

- Right across the world, the scientific facts are clear and mounting, unconventional gas mining is flawed with unacceptable dangers, un-economical and has no social license.

- It seems that no CEOs from fracking companies live near site. They, themselves, would not want to risk their health and put up with the noise, the smell and the visual pollution of fracking sites not to mention the possibility of disasters like explosions and earthquakes.

I oppose fracking in Western Australia, as well as nationally and globally.

The risks of onshore gas extraction are far too great and the disastrous consequences of poorly managed shale fracturing techniques are irreversible and would risk Australia's future water needs and our ability as a nation to feed ourselves and export our agricultural produce to the world market.

The negative impacts of the shale gas fracking industry in the United States is a lesson for us here in Australia, An increasing wealth of available U.S. research into health and environment impacts of the shale gas industry is a dire warning of the risks to our sovereignty, our water resources and the future health of our communities.

The negative impacts of onshore gas mining in Queensland are equally appalling, with state regulatory authorities abandoning their duty of care to local communities in the rush to develop a CSG resource. This industry is making people sick so that foreign mining giants can create profits. It is unconscionable and criminal. This is not the Australia I want for my family and our grandchildren.

WA must employ the precautionary principle to any proposals to mine shale gas and I implore you to ban fracking in WA for the health of future generations.

According to the world's leading climate scientists, the increasing intensity of climate feedback loops and global warming impacts from excessive Co2 in the atmosphere requires that we STOP burning fossil fuels. Fugitive emissions of methane from gas mining is having a deleterious effect on global warming and SW WA is one of the worst climate impacted areas in the country with water scarcity predicted to increase over coming decades.

Our government's cannot afford to ignore the warnings from scientists and I would like to bring to your attention this video presentation by Dr Anthony Ingraffea on the latest large-scale fracking techniques now being employed in the U.S. shale industry:

“Fracking Inquiry background papers a decade out of date: Expert”

<https://www.facebook.com/frackfreewa/videos/1068623269942084> (Frack Free WA on facebook)

The potential risks of allowing this polluting gas industry to operate in WA are unthinkable. I urge you to rule out any development of fossil fuel gas mining in the state and encourage you to promote and facilitate policy for clean energy technologies into the future. Our solar, wind and tidal energy resources are a better option for a sustainable Australia.

Please act in the interests of a healthy future for all Australians.

There are many clean/renewable energy options available to us here in Australia that can be implemented that would show case Australia as a forward thinking solution focused economy, rather than one that creates more problems for itself. Surely the potential increased costs of health care in these regions would be a deterrent to fracking, for both the current populations and the future populations.

Again I ask why have not taxation incentives been placed on the development of clean/renewable energy solutions? Instead of an industry that has a know health hazard component. Why are we knowingly putting our water sources at risk? Many other countries have banned Fracking Activities to ensure safe drinking water for their populations now and in the future.

This on going ignoring or the rights of people within the community shows a failure of the government to truly govern with the future in mind.

- Unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders. Food production for the future of Australia should be a priority.

When will the Australian government , “really” stand up and join other countries in actually reducing CO2 emmissions.

I live in south western Victoria and currently we have a gas ban. We produce a variety of prime, uncontaminated food. our town is filled with visitors because it is beautiful and unsullied. If we were to be fracked the loss would be horrific. I have heard that Labour and Liberal politicians have been owned by the big companies, especially the gas companies, since the 80's and it certainly seems that way. Nothing is transparent any more and the governments are not listening to the people. I am a mother and grandmother and all I want for our future is clean air, clean water and clean land – basic life necessities to me. I used to have faith in politicians, especially the individuals who are prepared to move from the party line. I believed you were in office to do the will of the people. I have travelled around Western Australia and it is beautiful. Please abandon all desire to frack the western state of our beautiful country

The Kimberley region was an absolute highlight during our travel around Australia. I don't want it destroyed and strongly oppose fracking in Western Australia.

Please use your power and do everything possible to permanently ban fracking and all unconventional gas mining in Western Australia. Mankind needs clean water, clean air and clean land for survival. We can't eat money.

The market should be required to divert all energy investment to the renewAble sector. It's the year 2018. We're running out of time. The government must make a 100% commitment to a clean energy future. Don't make your government one that goes down in history for screwing over future generations. You can make a change.

<https://www.facebook.com/frackfreewa/videos/1068623269942084/>

WATCH THIS VIDEO, SCIENTIFIC TRUTH OF FRACKING.

BAN FRACKING IT POLLUTES OUR LOCAL ENVIRONMENT WE DEPEND ON!

BAN IT!

IF YOU DO NOT BAN THIS, THERE WILL BE A HUGE UPRISING AND PROTEST WILL ENSUE. PERTH RURAL AND METRO RESIDENTS WILL NOT ALLOW THIS.

Fracking needs to be stopped and Australia must lead the way before the damage is done beyond repair

I oppose fracking in Western Australia. My biggest concerns relate to the devastating impacts seen in other states and countries, where fracking has caused detrimental harm to water ecosystems. I would like to think the precautionary principle is adopted here in WA to prevent the same. Western Australia is already facing difficulties related to population growth, climate change, loss of prime agricultural land, a reduction in fresh water supplies and other pressures. I firmly believe that:

I grew up in Moora. I know many farmers who have worked on the land for generations. Many of my school friends have taken over the family farm and all are profoundly worried, as I am, about the future of farming and the environment in WA in particular the opening up of fracking in rural WA.

I urge the government to ban fracking in WA. Fracking is an utterly unacceptable form of gas extraction. I expect the McGowan Labor government; the most intelligent and responsible government we have had in years, to pursue alternative ways to secure WA's energy future. We have abundant sun, wind and wave resources and these must be exploited to the maximum.

I have an 11 year old son who asked me to explain climate change to him yesterday. Have you ever done that? Explained climate change to a tween? It's heartbreaking. I want to tell him that our government is working hard to address climate change. But until fracking is banned, I cannot do that. Gas is cooking the planet. Our kids' planet.

When making your decision, please take these comments into account along with the following facts.

You are probably aware that the general public opposes fracking, especially when done on their land. Fracking has been one of the great catalysts of public opinion. There are few other policies which unite both sides of the aisle, and the others generally have to do with human rights and equality. To me, this suggests a highly negative public opinion on unconventional gas. There doesn't seem to be much real debate (excluding that which is funded by the fracking companies) as to the public health risks of fracking. I won't go into them, as I would assume you have received more than enough angry emails about that already.

WA is an amazing state, with unrivalled biodiversity. We need to protect it. Tourists come here to see the wildflowers, The majesty of the Kimberley, our birdlife, and many other natural wonders that make WA so great. They do not come here to see our gas refineries, and mines. I understand that some degree of mining is inevitable, but I urge you to not put the financial gain of mining companies over the small businesses which rely on tourism.

WA could become the epicentre of a renewable energy focus. Lets spend our money to upskill workers into new industry that doesn't cost us our great state.

I oppose fracking in WA and hope you will find it in the best interest of our state to move us forward instead of clinging to the past.

I am a technician, a teacher and a mother and I oppose fracking in Western Australia.

- Unpredictable climate variations have led to climate extremes. Last month we had 974mm of rain there is no way to ensure contaminated or treatment water can be contained with this amount of flooding. The risk of contaminated water entering river systems that transform from a few metres wide to 500 kms wide is impossible to mitigate. The entire two thirds of the Kimberly was cut off by road by over a week on two occasions in the past month. There would be no way to monitor problems at Fracking sites and no access to fix problems (even if remote monitoring was employed). Water and chemical use and wastewater production from fracking places WA's vital water resources at risk from contamination and depletion. Four years ago was one of the driest and hottest years on record and our state as a whole is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. Our land and environment are under growing pressure from a lack of fresh water. We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry.

I oppose fracking in Western Australia, and I strongly urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.

Unconventional gas mining and fracking is proven to be harmful to health. There have been many serious health effects reported from communities in Qld (and the US), following the commencement of unconventional gas operations.

Water and chemical use and wastewater production from fracking places WA's vital water resources at risk from contamination and depletion. In WA, our land and environment are under growing pressure from a lack of fresh water. Our state is one of the driest places on earth, and has experienced a significant decrease in rainfall over recent years, in southern WA in particular. We cannot afford to put our precious groundwater at risk for an unnecessary fracking industry, especially as it is no longer strategically vital, as it can be replaced by renewable forms of energy generation.

The health and wellbeing of our people and communities should be the priority. Clean drinking water is vital to this, and is already under threat due to changing weather patterns. Around the world communities are running out of clean drinking water (look at Cape Town). Let's make sure that the water we have remains clean from contamination and available as drinking water! Fracking and all unconventional gas mining poses a real risk and WA should not take this gamble. Please recommend to permanently ban fracking and all unconventional gas mining in Western Australia and prioritise the people's health and access to clean and safe drinking water!

PS: I'm a beekeeper in the region and fracking would compromise the environment in such a way that it would be bad for the environment, the bees, and everything else in it.

I oppose fracking in Western Australia. Having lived in WA for the last 3 years until just recently, I can appreciate the incontrovertible damage that would be caused by allowing this industry to proceed in WA.

The impact on tourism in WA at a time when the state is more accessible to European visitors than ever before with the advent of direct flights from London would be incredibly damaging.

I implore you to consider the rights and wellbeing of ALL Western Australians and think of the world we are leaving for our children. The beauty and pristine nature of our state is a truly precious gem which should not be harmed and destroyed in this manner. Please, please think of the repercussions of this and what it may lead to. Please.

It's my privilege and duty to protect and take care of the land where I live, hence I oppose fracking in Western Australia.

I urge the government to ban fracking in WA. Fracking is an utterly unacceptable form of gas extraction. I expect the McGowan Labor government; the most intelligent and responsible government we have had in years, to pursue alternative ways to secure WA's energy future. We have abundant sun, wind and wave resources and these must be exploited to the maximum.

I strongly oppose fracking in Western Australia mostly because I don't trust companies to put the interests of communities above making money, and:

all the below. we live in a special area to mine it and ruin the water and environment is despicable

- We all live in this wonderful state of Western Australia and enjoy the untouched beauty and healthy lifestyle. Everything will change if Fracking is allowed to happen.
- Tourism will definitely be a thing of the past as no one would want to come here and look at a state that has been devastated by these unconventional gas mining methods.

Please listen to the majority of people who have genuine concern for the practice and environmental harm already being done.

No freaking fracking!

CAN YOU 100% GUARANTEE WELL INTEGRITY FOREVER? Erosion, earth quakes etc. Once the wells are down they are there forever and need to stay intact forever. Can you guarantee this?

I wish to leave a clean environment for my children, grandchildren and their descendants. Let your heritage in government be cleaning up the environmental mess, not adding to it.

The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation. This has been demonstrated time and again in the NW shelf gas projects.

I would like you to watch Gasland and Gasland 2 please. It will not chew your time but see what future you would be a cause for.

Also remember an abandoned well still continues to remain active but not at a commercial level. There is still 500 000 litres of diesel in the Bunbury/Collie region from early fracking. We are just waiting for this to migrate. Why are we poisoning ourselves and our future?

My family and I have been landowners since we came to Western Australia over 70 years ago. we came for the clean air, the pur water and the rich unpolluted soils, in order to produce quality food in the most sustainable manner. This is what Western Australia is known world wide for, and once lost, can never be reclaimed. We have a right to be able to continue to pursue these ideals, and we owe it to WA to protect its rights in this regard.

Please do not follow the ill-fated path of other countries and States whose water, soil, health and lifestyle have been devastated by this insidious , uncontrolled industry. Your grandchildren will thank you for your wisdom.

Please stop this ruining our precious water supply, WA is such a dry climate, we cannot afford to risk damaging the water supply in this state!

- We have access to technologies that are environmentally friendly, so these destructive energy supplies are unnecessary.

I vehemently oppose fracking in Western Australia. The entire process is toxic to water, land and air. With climate change now rampant and the effects more and more devastating, it is imperative that we stop it NOW. Water security in particular is critical in our arid and drought stricken land. Fracked gas is NOT a clean transition fuel – in fact the ability of clean renewable energies in providing ALL of our power means that there is limited need for any transition fuels as there is already enough fossil fuels being mined already to transition if the will of government was there.

- Unconventional gas mining and fracking is harmful to health. Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. This adds additional and unnecessary demands on our already struggling health care systems.

- We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry. This also has enormous impacts on our agricultural and pastoral industries as well as tourism.

- The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation. This is unacceptable and very un-Australian.

- Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy. Why on earth would any government or industry want to destroy communities in this way, and again this has a huge impact on people's health and wellbeing.

- Unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders. With the vast amounts of subsidies that the fossil fuel industries get this is clearly favouritism for those industries with a total disregard of the many other viable industries that depend on non-toxic land, clean water and air.

. It is a little known fact that the waste from fracking is radioactive. There is little or no regard to the containment of this radioactive waste – it is treated like the rest. This is another element that is unacceptable to human health.

- Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change. Climate change has now reached the point where if drastic and immediate measures are not taken then humanity as we know it is doomed. This is not alarmist but fact. Many countries around the world have transitioned to 100% clean renewable energy. There is absolutely no reason why Australia cannot do the same. As we have a recalcitrant and criminally negligent Federal government at the moment then there is all the more urgency for State Governments to take up the cause. South Australia is making good progress and WA needs to do the same.

In concert with the overwhelming and ever growing majority I vehemently oppose fracking in Western Australia.

We do not need another whitewash inquiry that will further waste public money in order to excuse this indefensible ecocide.

The people are the foundation of all government and law whereupon the only authority invested in government derives from the consent of the people. In this instance consent is emphatically denied to fracking and the people demand an immediate and permanent ban.

This is not a request but a non-negotiable directive.

Failure to comply is maleficence of public office and will be responded to accordingly.

Ban fracking now!

Make sure your legacy to future generations is a good one.

Our environment, our people's health and continued enjoyment of our resources and community require foresight and accountability.

The following information you should already know and you will receive many many times more, but for me personally, I am against everything the process does – we do not need the short term destruction nor the long term devastation of our fragile landscape and agricultural industry – especially for such little return. Please do not be swayed by the un-almighty dollar, nor the persuasive tongues of the lobbyists. I implore you to be concerned about your own and everyone else's safe and healthy future.

I support all the issues raised with fracking our land as listed below, however being an older person my concerns are not for myself but for my children and grandchildren and great grandchildren etc etc.. I fail to see how fracking to make available the resources you seek will benefit anyone in the long term as we will use all the oil in gas available and then what?? Surely our future lies in finding other sources of powering our vehicles and other engines and heating and cooling our homes and workplaces in other less harmful ways. This world has become a sad sad place with too many people who do not give a dam about now except for the mighty dollar, that serves no purpose when we are gone. Enjoy life but keep it simple and use less dollars for that enjoyment. Yes stop and smell the forests, admire that native flower and walk over this great land like the traditional owners have and are still doing so.

This contamination can NEVER BE REVERSED. It is not worth the risk to jeopardise our current existence and all future generations existence for such an unnecessary industry. The future lies in renewable power sources that do not pollute our water, soil and air!

I, 100% Iron-Clad Rusted-On, oppose fracking in Western Australia.

I can only add that water is life and nothing I have researched leads me to believe that our aquifers will be safe from pollution caused by fracking.

I oppose fracking in Western Australia. There is more harm than good, and the future generation will pay the cost dearly for many generations to come. Communities will be affected negatively too. The damages is in-measurable in monetary term. Not to mention damage cannot be undone completely, the landscape will be changed permanently.

I oppose fracking as a means of extracting fossil fuels and gases. I am in no doubt that current methods are harmful to the environment and to our health. I have seen evidence of pollution caused by existing wells both in Australia and the US and heard personal accounts from people directly affected. The world is moving away from fossil fuels because of the proven negative impacts and fracking is a move in the opposite direction. I do not see the necessity for this new attack on the environment and industry must be made to continue the development of renewable and less invasive energy sources.

I am a teacher and a mother. I write to you for all these children and future generations. We have seen the damage gas mining does to people, and to the land in other areas of Australia. We live in a area with falling rainfall,we already have destination plants.We do not need to use/waste more water on gas mining.

We live in the brink of no return with carbon emissions and yet the mining of gas will bring more co2 to the surface and increase the dangers we face.

The SW is a food bowl for the state, we should be protecting our food and water at all costs. The gas mining will tie the people to fossil fuels when we could go solar and that is what the people want. In each area surveyed the statistics come out over 95% Australia wide. The people do not want gas mining.

I fear for our children when the price they will pay for this short sighted action. How will they live in the world with little rain, poisoned food and the mounting effects of climate change? They will hate us for not stopping fossil fuels and changing the direction of the way we live. I believe the government should be a driving force for change for the better. There is a term Intergenerational theft. WE need to follow a better path for our children.

I see and hear comments from the landholders and scientists with the dire AND irreverersable damage caused through fracking. How much evidence will it take – and at such a huge environmental cost. These practices should NEVER have been used when even there was a 1% risk of any contamination to aquifers and to land, water, and air.

It doesn't make a difference to me if one lives in the region where this fracking is being postulated or lives in a city many kilometres away. I am deeply concerned about the plight of our environment, the flora and fauna, and my fellow human beings. I know that by having our state enforcing a total exclusion zone to this “toxic” practice, we will be setting the standard for our fellow states and territories to follow. Someone must make the first steps to go forward.

** The area I have lived in for most of my life is ground water reliant for all fresh supplies. That supply is limited, we are isolated, our rainfall p.a. is meagre & we could never condone this action in our regions or State of WA. There is substantial drilling throughout these fragile areas with unconventional practises still (I believe) in action! I would like to refer you to search & refresh by reading the ‘Unconventional Gas Mining Submission 232’ by The Midwest and Gascoyne Alliance 14/03/16. Accessible on the inet , that being my source. A submission from, the heart of my existence, to the Senate Inquiry into Unconventional Gas Industry.

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia. I say no more!

My major reason for opposing fracking in Western Australia is the depletion and risk of contamination of our most precious resource, water.

At a recent Community Roundtable meeting held in Dongara, I was appalled to have my concerns regarding water resources, actually deepened. I asked a question regarding how much of the water used in the hydraulic fracturing process could be returned to the surface and recycled in any way. Previously, I believed that about 40-50% of the water was retrievable; however, an attendee from what was the DMP informed us that 70+% of water used was left deep underground, and so contaminated that it could NOT be recycled at all.

The laws of conservation in our environment do NOT apply when fracking is involve; it removes water from the environment and makes it unrecyclable.

I doubt I have to remind this Inquiry that Australia is the second driest continent, behind Antarctica, in the world. Permanently removing such huge amounts of water from our limited resources would appear an act of stupidity.

Gas companies and miners always use the “but agriculture uses more water than we do” argument. What they fail to acknowledge is that water used in agriculture is constantly recycled, either through evaporation or in the products they grow/produce.

Finally, I live adjacent to the Waitsia gas field and find the constant flaring and other intrusive activities of a conventional gas operation damaging enough to my mental and physical health, without adding the further threats that hydraulic fracturing poses to my environment. I rely on groundwater and rainwater, both already threatened by contamination from chemical spills and air-borne contaminants, and do NOT want to contemplate any further threats. I also wish to endorse all of the following concerns:

This is important for future generations, leaving them a liveable country with access to clean water and not to much pollution. There are so many different ways we can harness what we need to power our country.

I absolutely oppose fracking in Western Australia. Our environment is fragile and needs to be protected.

Our area has a natural winter wetland where many different types of birds come to breed. This waterway iis protected by the Local Shire but this doesn't protect it from the gas industry!

I would like to add my own words to the email below: I feel VERY strongly against fracking, because, quite simply, WATER is LIFE. Gas is not..... and therefore, IT IS NOT WORTH THE RISK

Factors against: Possible water contamination (yes – it's already happened.) Humongous consumption of water in the fracking process., thus reducing our already low supply. Invasion of other peoples land – People who farm to provide our food, be it with livestock or arable, either way, they need water. Uncontaminated water. People who have cared for the land for thousands of years are once again being ridden rough-shod & disregarded & disrespected, when in fact, we could learn from them..... Bottom Line _____ We need a safe & plentiful supply of water to keep healthy & alive. I would rather go without gas, & the money it supposedly makes.... Neither of which can we eat or drink.

I and multitudes of others vehemently oppose fracking in Western Australia.

Please consider our health and the future,

Australia is the driest continent on the planet (apart from Antarctica), it is ecological madness to engage in Fracking...If that is not enough of a reason, please speak to the traditional owners about how to connect with country and how to care for Australia...if 60,000 years of knowledge is still not enough of a reason then please see below for more...

- Unconventional gas mining and fracking is harmful to health. We need to keep our water clean for future generations!!!!

Please move to renewable energy instead!

I categorically oppose fracking in Western Australia.

- Unconventional gas mining and fracking is harmful to health. Conditions such as respiratory disease, eye, nose and throat ailments and symptoms of neurological illnesses have been reported by communities living in proximity to unconventional gas fields both in Queensland and the United States. Some independent Australian medical practitioners are now speaking out and warning of the consequences and future cost to the health system if Fracking were to go ahead in WA.

- Water and chemical use and wastewater production from fracking places WA's already vulnerable water resources at risk from contamination and depletion. As Australia is one of the driest countries on earth, and climate change is effecting annual rainfall in the South West of WA, it is difficult to justify a practice that may jeopardize our fresh water supply. Fracking also leads to large deliberate and fugitive emissions of methane, which will add to climate change and further reduce our chances of meeting the Paris targets. Renewable energy is the solution to Australia's energy needs, not fossil fuels that must remain in the ground for the sake of the planet and it's inhabitants.

- Landholders and Traditional Owners do not have the right to veto oil and gas companies in WA. The United Nations Declaration on the Rights of Indigenous Peoples states "that indigenous peoples have suffered from historic injustices as a result of, inter alia, their colonization and dispossession of their lands, territories and resources, thus preventing them from exercising, in particular, their right to development in accordance with their own needs and interests". Fracking places and unacceptable risk and undue stress on Indigenous communities and reduces their chances of earning a viable living from their land.

- Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy. In addition, Queensland has seen a reduction in farm productivity, efficiency, land values and credit availability to landholders.

I urge the inquiry to act in the best interest of human health and well being and make recommendations to permanently ban fracking and all unconventional gas mining in Western Australia.

I STRONGLY oppose fracking in Western Australia.
IN A WORLD OF GREEN TECHNOLOGY WHY WOULD WE CONTINUE TO SUBJECT OUR FUTURE GENERATIONS TO POLLUTION. WE NEED TO THINK AND ACT FOR THE NEXT GENERATION AND NEVER RISK A VITAL COMODITY LIKE WATE.
COME ON AUSTRALIA DONT BE DUMB, BE A LEADER IN GREEN ENERGY.

I vehemently oppose fracking in Western Australia.
It does no good for anyone in Western Australia apart from line the pockets of those people who have a share in the mining companies. In fact it does a lot of damage to everyone else in this state.

I want my grandchildren to have at least as good a life as I have. That means clean water.
Guaranteed

I strongly oppose fracking in Western Australia. I live in Glen Forrest in Perth's Darling Ranges. I am gravely concerned that fracking will lead to major long term risks and consequences that we can not even fully understand to our land and our health, plus the destruction of our beautiful countryside and wildlife.

- Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. This creates stress and leaves individuals and communities worried about their financial security and their ability to farm their land. This is unacceptable.

Along with greater than 95% of the local community,I oppose fracking in Western Australia.

I fail to see why we would want fracking to go ahead on our country.

It is dangerous and once groundwater is affected there is no turning back!
Let's learn from others experience, please!

I want to say that I have read and watched many authentic reports, videos and news items in fracking and cold seam gas exploration. As a teacher I am concerned for my students future, living in an Aboriginal community I am concerned for the protection of 'country' and as a human being I am concerned for the future of the planet if you decide to allow this in WA.
I will add that I also oppose it because :

It is time this country starts putting our future first and starts skilling workers in renewable energy. At the end of the day if our environment is destroyed there will be no jobs and a very sad state of lifestyle. Don't put jobs and a quick fix before the environment and our peoples future.

- All of the above reasons will affect my family directly as members of my immediate family live in all states of Australia in various agriculture, social and community careers and wish to see the vibrance of our natural land left untouched for generations to come.

As the son of farmers that made their living off the land I know firsthand how precious the soil and water is. Despite advances in technology this mining technique will never be safe enough especially when there are viable alternatives. Please protect our precious resources and choose a different path.

I wholeheartedly oppose fracking in Western Australia.

I honestly believe that more investment should be made in renewable energy sources. We have the chance to make the right decision for our planet, our children and our future and choose to leave mining in the past and use the clean renewable sources our beautiful country provides such as solar and wind to power us into the future.

Be the government that goes down in history as brave enough to listen to the people and deliver them what they want. Otherwise I am afraid that we will not have much of a future at all.

I have seen devastation from fracking in Queensland, it cannot happen again.

I oppose fracking in Western Australia and nationwide.

Here is an email I recently sent to my local members of parliament:

If you have children and would like to create a sustainable future for them you might like to consider banning Fracking in this country.

Our most important resources are clean Water and Air which supplies us with sufficient food. The Methane gas released in fracking actually has a worse impact on the environment than Coal. Since Methane is released naturally surely we could collect it from sewerage systems and other processes. Seismologists have pointed at fracking operations as the cause of increase in frequency and size of earthquakes in Oklahoma. A study in Canada showed that current measuring practices which are taken at ground level cannot adequately show the extent of contamination of fracking operations on underground water supplies. In America they have allowed fracking near residential areas and the results are catastrophic. Would you like your children to be proud of your work as a politician or embarrassed because you chose to ignore science over economics and your political decisions contributed to the Earth's destruction? The economics do not consider or require fracking companies to deal with the environmental consequences of their operations. If they did these operations would be economically infeasible. Once the damage is done to the air and water supply, no amount of money will be able to restore it. Stephen Hawkins has said Human kind have only 100 more years left on this earth and should move to another planet. Rather than continuing to mess up this planet we should be aiming to restore it. We are smart enough to work out better ways to produce energy in a sustainable way. The internet is full of them. Why don't politicians pull in their belts cut their perks forget about royal commissions and put the saved taxpayer dollars into better outcomes for all Australians. Stop wasting money on examining the past and put money into a viable future. Reuse, reduce, recycle.

Thank you for putting your best foot forward to ensure Australia's future for all Australians.
PS I am posting this up in the Better World Party under a video I strongly recommend you watch.

There are far more environmentally sound methods of energy which would be FAR MORE PROFITABLE. ie Solar and Wind turbine – more jobs, more money and better for all.

We live on an agricultural property and use groundwater for growing our vegetables, and when necessary as a top up for our drinking water.

I do not live in WA but I have relatives living there. I would not want them to suffer ill health due to gas mining and fracking. Fracking will damage or contaminate the water in WA where the water can be scarce due to lack of rainfall. So Australia needs to take special care of water resources. Fracking in other parts of Australia has led to contamination of rivers and streams with gas coming to the surface of the water.

There are now safer methods to produce power, such as Solar and Wind – safer for people and for the environment.

Please do not allow fracking and gas mining in Western Australia.

I oppose fracking in Western Australia.

My major opposition is to the damage that Fracking will do, to the health of people within our communities. I'm scared of the impact, of not having clean water sources or healthy food, and what effect that will have on us and the future inhabitants of our land. I care about our land and environment on a global scale. We have the opportunity to even the scales of past mistakes, we as human beings have made. The only mistake will be if don't learn the lesson. We don't need gas or money to survive. We need to protect our planet. I have had the incredible opportunity of growing up in many places in our beautiful Western Australia. Why don't we send a message to the world, that we respect the earth we live on and stand together to protect our uniquely beautiful Western Australia. Let us be a shining light of good choices and eco friendly. So much of our State is pure and untouched. Let's keep that way! We are the custodians. It's our duty to say No! Not now, not EVER!

There are so many other sustainable ways to create energy! How can you pursue fracking and unconventional gas mining when we know that:

Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include brain damage in young children, respiratory ailments, nose throat and eye irritations and neurological illnesses.

We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry. Surely, if government expect individual home owners to use less water it is blatantly idiotic to allow miners access to our dwindling supply.

Land owners must be allowed to decide who and what will happen on the land they have paid for and work on. The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation.

Have you seen what this has done to places in America. People can't drink their own water, in Queensland rivers can be set on fire and also people tap water. Children have already been affected by this let alone the country, animals, farmers, family's, community's the list is endless it's bloody disgusting. We don't want chemicals in our drinking water, rivers, food it's bloody ludicrous. Frackoff!!!

My name is Maureen Williams and I live in Hervey Bay Qld I oppose fracking in Western Australian

It is unnecessary.

PS My daughters family have purchased their dream property amongst dairy properies at Dardanup This is prime agricultural land with a good clean underground water supply It would be a tragady almost criminal act to allow fracking /drilling in this area and put it at risk of damage . IT MUST BE PROTECTED

I've personally worked in the renewable energy sector and given it's advancement in reliability of supply, storage, and affordability, I'm concerned that the further development of non- renewable energy sources, including gas, would defer investment and motivation into seeking the renewable alternative.

The questions that I feel should be included are;

Will the development of gas fields reduce the necessity and demand for, and hence investment into, long term renewable energy production in both large and small scale.

Will the renewable energy alternative to onshore unconventional gas fracking, and all its complementary requirements of water use, waste storage, pipeline and access routes, be safer for environment, land use, water, animals and humans both in the short and long term.

I believe that the production of one product (gas) for economic benefit in spite of risk to other products is pointless.

We must compare it to the alternative and ultimately ban fracking in Australia.

I wholeheartedly agree with the below:

Please think of the children who will be left to suffer in our mess. Please think of the ecosystems we all need to survive. Please think of humans as smarter, wiser and better than this. We can do so much better.

West Australia has had a gas reservation policy in place for domestic use. This policy has been in place for several decades. Initially I believe, and until recently, this only applied to the North West Shelf gas fields. This is a relatively small field in comparison to the recent massive expansion of the West Australian gas industry.

Yet for those decades that this policy has been in place, the domestic consumption of the available reserved gas has never exceeded 60% of the available domestic supply. This was during the last mining boom. The Mining industry is by far the biggest user of domestic gas.

The North West Shelf (NWS) gas field has expanded recently, and with the increased capacity, but also increased export of NWS gas, The corporates extracting the gas estimate a life span of at least another 20 years with an annual estimated increase in consumption of about 10%.

In that context alone there is irrefutable proof that there is absolutely no need to develop any onshore gas fields, let alone use such toxic technology as fracking to do so.

We have a guaranteed supply of domestic gas for at least 20 years from one project alone, aside from the massive increase in gas supply from the other fields that are coming online now.

Long before then we have the capacity to transition entirely into renewable energy technologies to supply 100% of Australia's domestic power needs.

It has been proven fracking is not beneficial for the health of people, animals and plants. In fact it is harmful. People report health problems when Fracking happens nearby. That is no wonder as water and chemicals are mixed and that cocktail gets into water-system. We can not waste precious water, especially in the dry regions of the country. We have to think about people, about custodians of the land who still live off the land. They, as all other humans, have a right to harm free lives. Harming people and the country for a short financial benefit is very shortsighted. We have to be mindful of the planet we live in (Ocean dead zones, Fish depletion, Climate Change are already at play, we don't need fracking on top of that)

Besides that will harm tourist industry, and that is something Australia doesn't want to lose. What about the Sun!? We have plenty of it, yet tiny rainy UK produces more Solar energy than, vast Sunny WA! Isn't it shocking!? And quite embarrassing. What if we get out of the past, and progress to the future, to get energy without HUGE consequences to the planet? I plead you to come to the conclusion that ban on fracking and all unconventional gas mining in Western Australia is the way forward, and logical solution for the future of West Australians and the Planet.

I live in suburban Perth, Western Australia and am concerned about many issues arising from fracking. Some of my concerns are as follows...

Aside from what's written here, I personally strongly oppose fracking – we need to look after our environment, not continue to pillage from it. Think of the future generations.

As a Native Title Support Officer in Western Australia I oppose fracking in Western Australia.

Our connection to WA is my husbands grandmother and whole family there. He was born in Bunbury. So we have a valid interest.

I oppose fracking in Western Australia. HURRY UP AND BAN IT ALREADY!! This is outrageous that it has continued to be considered when the FACT is the mines will leak toxins into our environment that is NOT REVERSIBLE. It puts too much of a risk to our water supply, endangering animals, agriculture and us! I DON'T WANT IT IN MY COUNTRY!!!! The greedy organisations can make their money some other way!

Please put the environment and people first not economics.

it is an absolute outrage were still using fossil fuels in this day and age!! We could power the entire world from Australia's sun and wind alone!!

Please use your common sense

There is enough gas that is already mined, we do not need to poison our land, water and future for our children. Please I am begging you, if you care about you, your family, do not allow fracking to happen, it is not worth the money the companies want to give you. How many people would give up all their wealth for the health if they were dying. The land will die if fracking is allowed and we will suffer for it too.

It does not take a genius to perceive the other attempts at fracking in USA and round Queensland and the devastating effects it has had on the environment, the inhabitants, the air the water..... The fact that every remaining extinct gas well in USA leaks toxic polluting chemicals..... The fact that Australia is the windiest sunniest continent on the earth, and we should be moving towards green solutions, not highly polluting insane methods of extracting gas from kilometres under the earth.

WA is a dry state getting drier. There is barely enough water as it is. Witnessing the aquifers in Queensland becoming polluted through fracking beneath the aquifers, it is a no brainer that even the possibility of polluting our aquifers is a BAD IDEA.

And so you're in a position where you are being co-erced against your better judgement and your common sense to act in the best interest of big businesses.... I suggest you think twice about what legacy you wish to leave to your children.

Leave our beautiful environment pristine from fracking and other mining practices. Our children will thank us. If you have any, don't be selfish!

The negative environmental impacts of fracking that have been seen in other parts of the world are something we should learn from. Look around the world and see videos of tap water being ignited, rivers being ignited all because the fracking process has polluted the waterway. Once pollution has happened it is difficult if not impossible to reverse.

Perth is dependent on clean water drawn from our under ground aquifers. The fracking process uses a myriad of chemicals that have potential to harm our environment. WA is known for being a place of beauty with unique wildlife and environment. Please protect it and ban onshore gas mining / fracking.

I oppose fracking in Western Australia. i have been collecting information on fracking every 4 hours from around the world for the last 6 years using technology building collecting database of information this information has been haked twice in 3 years ,its very important that you understand that there is no safe way to fracking that is a given .

I oppose fracking in Western Australia. I am well aware of the possible effects on our water supply and food production – we have ample evidence of the damage done in other countries, including the U.S., by earlier fracking and ‘unconventional methods’ of gas mining and exploration. You already have the evidence of danger and damage – this is unacceptable practice.

• We can ill afford to contaminate any of our limited water supply – we are reliant on groundwater and it would be an expensive disaster should contamination occur.

• I'm very concerned that Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. It is vastly unfair to give big corporations the right to invasive industrial practices on land where its simply not wanted by the owners/ landholders. We in the city need our farmers to provide us food. We need them on the land and we need them to have healthy water supplies. Unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders.

We also especially need our Traditional Owners to feel respected and have the dignity to make their own decisions about about what happens on their land. Without that, the terrible suffering of (and enormous costs of)maintaining Indigenous communities cannot begin to be addressed. It is a basic fact of human rights that dignity and autonomy are essential to well being. And well being is essential to addressing disfunction and hopelessness.

• Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change. I'm not sure how old the panel members are, but I'm not especially looking forward to the decades to come on that front. Nor I am pleased about the climate legacy we are collectively leaving for our children. Leaving Western Australia permanently may end up being my child's only choice when its too hot and dry here. Will we contribute to that or help to mitigate it?

I oppose fracking in Western Australia. As we have seen in other areas of the world, including Qld and USA, Fracking can contaminate groundwater supplies as to permanently render them useless. In Australia, particularly the drier areas, this is a crucial risk we can not afford to take.

The cards are stacked unfairly in favour of the gas industry and other mining companies, and human rights are being ignored for a resource that is no longer strategically vital as it can be and will be replaced by renewable forms of energy generation.

Renewables and other free energy is the way of the future and as they become affordable, consumers will pay for their own systems and leave governments behind, this is already happening.

I have only ever heard arguments advocating for fracking to come from those companies who will benefit financially. I urge the panel to place greater weight to the arguments against fracking because of the social and environmental damage and impact to our country.

Just think about if you wanna support ruin the land and health conditions of your kids, grandkids, friends, family, neighbours and the rest of us

I hate hate hate that our state would consider Fracking.
I hate that we would harm our environment.
I hate that we would treat our landowners with such disdain.
I hate that we would allow our conservation land to be potentially used for financial gain.
Please stop!!

There are alternatives !!!!!!!

Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. This is wrong and creates stress and leaves individuals and communities worried about their financial security and their ability to farm their land. Sovereignty was never seeded. The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation.

I oppose fracking in Western Australia, as the risks just don't outweigh the benefits – and so many of those risks have long-term and irreversible consequences. The health and wellbeing of our people, our land and our water needs to be put ahead of any economic benefits. We need to look to the rest of the world and acknowledge some of the terrible outcomes that have occurred, which we'll otherwise be doomed to repeat.

The old idea of 'Progress' means nothing when you are poisoning the people and ensuring your grandchildren have no future on this planet. Let's not leave them anymore of our mess to clean up. It is time to redefine 'progress' and make it about ensuring that there is a future worth fighting for.

I am a mother of 3, and a teacher in my local community. My concerns are for the future of my children and the children I teach. Our Kimberley country is raw, diverse and precious. Fracking is a dangerous short-term solution with massive risks and long term consequences. Please hear my concerns with the volume turned up to the maximum:

Please! #FrackOff #FrackFreeWA #WASaysNo

I oppose fracking throughout the whole of Australia.
Please have some decency and do the research into the harmful effects fracking has on this precious planet.

Do not hide yourselves behind these corrupt entities you've all become a wage slave to.
Wake up to yourselves and start having some respect for the mother earth which is sustaining your life.

I think WA should value its pristineness. This will be its most valuable resource in the future when others are looking to buy from a place that is untainted. I believe there are too many risks associated with fracking. We have so much to clean up in this world already. Do we really want to add this to the legacy we leave future generations who will have to live with our last minute grab on finite resources?

I oppose fracking in EXMOUTH and in the whole of Western Australia. In fact why does Fracking exist? Oil and gas are fossil fuels that are on their way out!! Why use a desperate measure like fracking when the money needs to be spent on power generation like hydro, wind and solar? Solar in EXMOUTH is a no brainer...but instead we have fuel run power station with no capacity for more solar!!!

Water is such a precious resource in Western Australia or for that matter anywhere on the planet. Water should never be polluted in any way. Exmouth is a World Heritage site and yet the Government views it like any other location for Fracking.

The economy of Exmouth is reliant on our environment staying as a place of beauty and wonder, especially the Gulf and ocean at our doorstep. Artesian water is a precious resource that allows us to live here and for our tens of thousands of visitors to visit Exmouth and beyond.

- Fracking is So wrong for our planet!!

I oppose fracking in Western Australia, for social and environmental reasons.

Unconventional gas mining and fracking has a known and well-documented series of harmful and hazardous affects on local populations. These side affects spring from a variety of released chemicals inherent with the processes involved and also from the the fracturing of ground water reservoirs and their subsequent poisoning with the hydrocarbons being sourced. This is particularly so with fracking, where the immense pressure involved in the process causes irrevocable damage to the groundwater in the local areas, damaging fragile eco-systems, agriculture interests and the health of local communities.

Communities living near gasfields in Queensland and the USA, for example, have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses. The aforementioned risk to groundwater supplies and other water sources from fracking, chemical use and wastewater production from unconventional techniques places WA's vital water resources at risk from contamination and depletion. Our state is one of the driest places on earth and our land and environment are under growing pressure from a lack of fresh water already. To further constrict and damage the maintenance and availability of our most precious resource is deeply unethical and puts our state and our country in a precarious position as we consider our continued existence, not merely to the end of the financial year or political term, but for the upcoming decades and centuries to come.

Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. This unprecedented level of stress placed on landholders is and always has been unreasonable. To further extend the privileges of mining companies to seize and permanently destroy the land and endanger the communities they operate around is also deeply unethical and can reasonably be seen as a threat to democracy and freedom in this country, solely support by the wealth generated by this industry. Australia is already treated as the world's quarry, it should not persist in this paradigm of operation at the expense of its people.

Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy.

Unconventional gasfields in Queensland have also seen reductions in farm productivity, efficiency,

land values and credit availability to landholders. In other words, unconventional techniques destroy the availability and productivity of agricultural in the areas it takes place in and as a result endanger another one of Australia's vital industries, having disastrous effects on local communities and our country at large.

I urge you to consider how the legalisation of fracking, against the good of local communities, agricultural interests and with its inherent and dramatic environmental costs comes at the price of failing to protect our local Australian communities, our natural treasures and resources and the preservation of our great country for generations to come. I find this reprehensible and inconsistent with the principles of democracy and common decency, therefore I strongly urge the inquiry to recommend the permanent banning of fracking and all unconventional gas mining in Western Australia.

There are some serious conflicts of interest in this industry with so many industry linked people able to make and influence decisions (and the public are not stupid...we know money changes hands grease palms and decisions!)

I have been following the pro & cons of fracking for over a decade. Nothing I have read has convinced me that it is a safe or viable option. The total devastation that it causes especially to farming communities all over the world is unbelievable; that in this day and age of accountability it is allowed to go unpunished. In fact it has caused me to actually support alternatives for power. If all these hundreds of thousands of new housing estates were fitted with Solar panels it would create a massive input to the power grid to at least look at alternatives to gas in households. I totally oppose fracking in Western Australia. Lets at least protect WA from what is a catastrophe waiting to happen to our communities.

Please consider the future of our wonderful state!

It is not in the public interest for any on-shore gas mining to occur in Western Australia. The state government has a responsibility to protect the 'commons', water, soil, forests, atmosphere and our unique flora and fauna. The state government must recognise and act in accordance with the legal concept known as the public trust doctrine. The government must maintain these resources in trust for public use, ahead of private exploitation.

I oppose all onshore gas mining in Western Australia.

I want a total onshore gas field ban in or near our agriculture lands, aquifers, lakes, rivers, streams, underground water table, towns, national parks or indigenous sacred sites. That is the only way to go, they do not have social licence to extract gas onshore. I do not want my farm, home and town in Harvey being turned into an industrial park.

We purchased our farm in Harvey for the lifestyle and clean living, we have our apiary here because the South West of WA is a very unique place on the planet where the bees don't have the pests and disease like everywhere else plus we have very special flora. Our South West is a treasure trove for our bees and bee keepers. The world needs to help the bees not take their healthy environment away from them.

We also produce beef that we sell to provide food for Australia, we free range our chickens, we drink our rain water and that's all we have to drink, there is no back up water coming from the city. My grand children play here. This is too serious to take chances with our agricultural lands, our air, human and animal health and our water.

We know from the studies and experience of people around the world that, not only do wells, pipes and other infrastructure leak, but the ground may also be leaking through cracks and fissures. Fugitive methane emissions are strong indicators of the presence of toxic gasses such as sulphur oxide, nitrogen oxide and volatile organic compounds. It is devastating for human health and the environment. We live on EP 416 and we are right on top of a fault line. Yet we still have the threat of industrial gas field on our farm and the farmland around us.

All the experience around the world shows that people and gasfields should not mix.

I urge the inquiry to make a recommendation to permanently ban Onshore gas mining in Western Australia.

Although I am not a resident of WA, I have family living there. Importantly, WA is a part of my nation, my country. I strongly oppose fracking in Western Australia for the following reasons:

Nothing is more important than a safe, permanent water supply. Unconventional gas extraction by fracturing the earth's crust may compromise this most basic essential.

Our state is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. Our land and environment are under growing pressure from a lack of fresh water. We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry.

This resource is no longer strategically vital as it can be replaced by renewable forms of energy! Fracking leads to large emissions of methane, adding to climate change.

I have a home in Preston Beach that borders Yalgorup National Park. National Parks should be off limits to any developments proposed. I have lived on the National Park many years as my father was the Park ranger. We have many animals and flora that would be endangered by fracking in the area. Yalgorup National Park is one of Western Australia's tourist hot spots with the many lakes, animals and flora. We have a major tourism draw card with the Thrombolites in the area.

I oppose fracking not only in Western Australia but right across the nation. We have plenty of LPG and oil in Australia that can be sourced from offshore and land drilling. There's no need for fracking. This unnecessarily dangerous practice will only benefit overseas billion dollar co's who have no interest in any damage they leave behind.

I oppose fracking anywhere in the world.

I live in the Northern Rivers of New South Wales. Our community opposed fracking in our area and had the mining company move out. The government bought back the licenses. A huge majority of the population, people from all walks of life, united to stop this dangerously detrimental fracking.

Short term gain or profit should not be to the detriment of the environment and our water.

There is enough research showing that

As a research scientist in plant biology and ecology at the University of Western Australia I strongly oppose fracking in Western Australia and the significant environmental and social costs it will bring to our state.

Technologies used in unconventional gas mining and fracking is yet to be optimised. Let other countries make their mistakes and face the unknown repercussions of exercising crude techniques in the extraction of oil. Once it can be proven that fracking is holistically harmless then we as a community should consider the option of fracking.

I grew up in WA and moving back there soon. I actually work in the oil and gas industry and know of the destruction fracking causes even to the eye. What it does to the planet under the surface is even more scary. Do the world and our country a favour and stop fracking!

We live in the Swan Valley and would hate to see drilling wells all around the hills and let alone the water contamination and gasses released damaging our environment. Think about our kids what about their or our future. There are enough property developers around messing up our environment pulling out trees and not putting anything back in order to sustain our environment. Please money isn't everything.

I'm very disappointed that there was no mention of any comment by David Templeman about gas fracking. Does this mean he condones it?

I hold an Associate Diploma in Agriculture from Curtin University of Technology, a Master of Science in Natural Resource Management from The University of Western Australia and a PhD in Geophysics from Curtin University of Technology. I oppose fracking in Western Australia. From my studies of the hydrogeological architecture of the agricultural areas of SW WA I can categorically and confidently state that fracturing of aquifers PERMANENTLY changes the hydrology and behaviour of those aquifers in ways that nobody can claim to be able to predict or call "safe". This fracturing of aquifers has the potential to turn fresh water aquifers saline or even dry them out. Nobody can say with confidence that "fracking" is safe, however I can say with confidence that whatever the impact, it will be permanent.

The issue of the safety of the chemicals or minerals used in the fracking process. is secondary in potential risk of harm to that of the permanent damage to the hydrological behaviour of our aquifers.

For these reasons I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.

The South West is the food bowl of Western Australia. It is such a precious resource. The choice is not 'To frack or not to frack.' but ' To allow fracking or to continue to produce high quality food and, as far as Yalgorup National Park is concerned, to protect some of the last remnants of coastal vegetation along that strip.'

This fracking is so shocking on so many levels but once it is done what will be the end result for the future of this land when the water is poisoned and or destroyed. It is pure evil by a few to make a profit in the short term and then there will be no consequences for people who are the perpetrators of the wonton destruction of environment!

But then you know all the above already..... please don't miss this opportunity to say NO!.. and keep the gates locked to our most precious asset!

We live in a wonderful part of the world, we want this precious land conserved, protected and cherished for generations to come. We don't want land owners forced to allow access to companies who will potentially poison the land, water, livestock, nature, flora and fauna and indeed their families, their children... The effects of fracking are far reaching and catastrophic, we have seen the long term damage it causes. Why is sustainable energy not being used??? We need to care deeply for the limited water supplies we have, we need to know our food is safe to eat, we want our families and the environment kept safe.

I cannot understand how we could have the audacity to risk our home, our planet, our environment. To do so is reckless and irresponsible

The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation. It's also negligent for landowners to be forced to have fracking on their land for the sake of a single use product when it could render the land useless and harmful and affect surrounding properties in the same way.

I oppose fiercely, any form of unconventional gas exploration and /or extraction including fracking anywhere in Western Australia.

- Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses. The victims of these fracking operations are powerless.
- The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation. Propaganda from fracking companies has been misleading and gives a false sense of safety to landholders and traditional owners.
- It is distressing to see the personal stories of destruction and loss from people who have been affected by fracking.

There are many reasons why I disagree with the fracking of the land. Not just in the Kimberley but also the whole world.

The Kimberley in my eyes is one of the last true homes to the Aboriginal people of Australia. The blood of my ancestors that runs through my veins can feel this.

I personally disagree with all fracking, Western Australia has already been raped with the construction of several mines across the state, which deeply saddens me.

The land is sick and becoming weaker for the sole reason of our own greed, I use the term 'our' because everyone sits idle as we allow large corporations to desecrate sacred land in the name of profit.

I do not believe these corporations should hide behind the premise of 'their isn't enough evidence of the effects on the land'. The Earth itself is becoming more and more weaker due to many reasons, greed being at the center of it all.

As we are all apart of the human race, I feel as if we need to refocus our beliefs on sustainable practices. So that they may benefit not only us but also the land we live on.

With so many issues resulting from Unconventional gas mining around the world, effects on the health of people living in the area, the damage to the environment to name just a few I oppose fracking in Western Australia. Yes I don't live in WA but after seeing the damage done to the environment in other parts of Australia this practice needs to be stopped. Having visited and spent a lot of time checking out the magic country in WA last year and meeting the people please do the right thing and say no to this type of mining.

(NB – I started with the guide submission but have added in additional, so please READ it all)
I oppose fracking in Western Australia. And indeed in all of Australia

- Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA, and elsewhere in Australia.
- Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy. In fact a recent report verified huge rises in hospital admissions resulting directly from the impact of CSG mining.

Unconventional gas mining (incl CSG, tight Shale, etc) has led, overseas, to confirmed earthquake activity.

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia. This can assist in other states and territories for public opinion and the will of the people to be observed.

Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses. Other hazards are fires and explosions.

At this time of climate change it is amazing to me that governments are allowing the exploration and extraction of fossil fuels. Future generations will wonder at our foolish and blithe disregard for evidence that links the burning of fossil carbon and the deteriorating situation of the earth.

I oppose fracking in Western Australia. Every day, stories pertaining to the pernicious effects of this practice surface all around the globe. How could anyone possibly want to put our natural environment at risk; particularly the groundwater that helps sustain our agriculture in such an arid land? How can anyone gamble with the health of our children?

I have been a teacher in rural schools all over our state. My professional life was predicated on believing that rural children deserved the best our society could provide – especially because it is THEIR families who produce the food and raw materials so needed by city dwellers. To think that ANY government is prepared to even contemplate allowing such a dangerous practice to occur is reprehensible. WHY would you want to take the risk? Especially in the face of the mounting evidence of the deleterious consequences? I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.
And Australia wide its destructive and polluting to water and air alike

Fracking is far too dangerous a process when you take into account the long-term harm it can do even if is effectively managed. Cases where Drilling company are not responsible for repairing the damage they cause. The short-term profits are being plundered by the international companies with Australian accepting the crumbs they leave behind. MALCONTENT TURDBALL these are OUR natural resources you're giving away. Make them pay like every other country on the planet.

You will ruin our land in this beautiful ocean side community amongst many other parts of the southwest. Animals will not be able to be sustained on polluted ground, polluted water....should there be an accident or leak & there will be. Our land will be worthless! Would you live here & allow this to go on under your feet? FRACK OFF.....I can't say it loud enough!!!!

My husband and I, along with our two young sons are currently building our forever home on four and a half acres in Stratham. The area is home to other families with young children and our hope is that we will live in a friendly, healthy community. We have designed our home to be as passively energy efficient as possible and we hope to live sustainably, with chickens and our own vegetables and fruit trees and room for the boys to explore nature and run around freely. We do not want our investment to be jeopardised by gas exploration. We are full time workers, pay our tax and contribute positively to the community and environment. We have spent a fortune to secure our dream. We oppose fracking in Western Australia and we add our voice to the following concerns:

I live on a fragile property between a salt lake and the sea. My husbands family have had the property since the sixties. The groundwater is shallow and minimal, and the land is sand dunes, and salt wetlands. It is a major migratory bird haven, and home to kangaroos and other wildlife. We are custodians of this land, and our neighbours are of like mind. We are vehemently opposed to fracking, as we believe it is completely unsustainable, and destructive to the environment.

Why I am so suspicious about fracking? Well, reality in the US shows us that it's detrimental to our environment (land, air and waterways) and clearly impact community, especially farmers. What are we going to do if we stop farmers from doing their job? Buy and import cereals and breeds from overseas!!! Is that really what we want, when a solution to carbon emission is living local (produce-shop-consume). Can't we learn from the past? Technology, ingeneering have proven their own limit several times through history. Why continuing doing so? Why not listening to the voice of prudence, calm and wisdom for once when it comes to health and wellbeing? Please be a subject of honor on this planet and consider our voices. History "Yesterday solutions are nothing more than the mistake we are facing today"

I have lived and worked in various positions in Broome, Derby, Fitzroy Crossing and Kununurra in WA, and Charters Towers, Cairns and Mareeba in North Queensland since 1996. Prior to that I lived and worked in Denmark, Albany and Bridgetown. Since 2015 I live on 5 acres backed by bushland in Chittering. I oppose fracking in Western Australia.

- The Gnangara Mound aquifer on which Perth and the region depends is a finite resource which we do not fully understand and which is not being replenished as our use increases while rainfall decreases.
- Traditional Owners are concerned that the integrity and holistic function of the land and its ecosystems will be destroyed, severing connection with the spirit of country and their ancestors. The cards are stacked unfairly due to short term ignorance in favour of the gas industry.
- Unconventional gasfields do not make economic sense. Unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders.
- Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change. Fracking also introduces other chemicals into the environment at and below ground level.

While I do not live in an area subject to fracking my region is being explored by a gas prospector. The short term benefits if mining are pursued by governments and overly confident mining sector. Industry experts and public servants in the sector tend to be overly confident in their abilities to mitigate damage. I support efforts in this nation and state to disallow fracking. I urge government to consider long term environmental, social and climate risks and ban fracking.

If this activity could be achieved with " zero harm" which I understand is a motto of one of our big mining companies, I wouldn't have such fearful concerns Zero harm. Sounds nice eh? Fact is, pumping chemicals into the ground is far from the mythical zero harm theory. Fracking is simply too risky to groundwater etc. They don't NEED the money like this country NEEDS it's water.

Fracking is fundamentally wrong. Short term profit at the expense of permanent environmental damage. Seriously, I can't believe we have to have this debate. It shows how corrupt the current system is. Shut it down.

Listen to us, the people of WA. Think of our future, the future YOUR family have to live in also.

On one of the driest place on Earth and with alternative natural sources of power becoming increasingly accessible with each passing month, I see no excuse to even consider such a dangerous activity as Unconventional Gas Mining through Fracking for WA.

My number ONE concern, and we cannot minimise this in one of the driest parts on the planet : Our land and environment are under growing pressure from a lack of fresh water and we can't afford to put our precious groundwater at risk for a short term and unnecessary industry, which is precisely what unconventional gas fracking is.

Landholders and Traditional Owners are refused the basic right to refuse access on their land to oil and gas companies in WA. This creates unbelievable levels of stress and leaves individuals and communities worried about their financial security and their ability to farm their land. For example, the unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders. How is this right and fair?

Lastly, fracking leads to large deliberate and fugitive emissions of methane, adding to changes in our climate far more than does Carbon Dioxide.

I very strongly urge the inquiry to make a recommendation to permanently ban this pernicious form of mining in Western Australia.

I urge for a total ban on fracking in the whole of WA, not just a ban in the Southwest and Swan Valley. There is no scientific proven way that the fracking and invasive gasfields industry can be safely regulated. The risks are always there, regardless of regulation. I am a member of Frack Free Greenough, and 96% of residents of Central Greenough oppose fracking and invasive gasfields. There is no social license for this industry. Also:

- Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses. See for instance the Concerned Helath Professional of New York's publication: 'Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking'.
- We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry. While chemical additives make up less than 2% of fracking fluid, this still translates to large quantities. An estimated 18,500 kilograms of chemicals were used in coal seam gas fracking in AUstralia, with up to 40% not reciverd (see Coasl Seam Hydraulic Fracturing Fluid Risk Assessment. Goldor Associates 21 Oct 2010. Fracking wells are guaranteed to leak, a conservative estimate is between 4.6 and 8.9%. See for instance Davies et al (2014)(sciencedirect.com/science/article/pii/S0264817214000609

I oppose fracking in Western Australia and I am very passionate about the land, animals and the impact of what fracking will do to our environment, our health, the land and the food and water we drink. Most of all our livelihood! What about Tourism! What about creation of Jobs! What about the effects it will have to Climate Change!

What you propose to do to Western Australia and all of Australia is going to effect us all. To frack this beautiful land is not only disrespectful to the indigenous people but to the Living breathing Planet we call Home. How would you like to have your blood and oxygen depleted from your body. Well the Earth is body the Llife and the Resurrection for us all! The Earth is a living being!!! Without Earth we have no life. Time to rid the future of all this mining of resources when we should be looking towards renewable energy sources instead. The government has the money and its time to Act not to destroy what gives us life and prosperity.

What are you proposing to do that will establish change to benefit communities! Lets start with providing Solar panels to all home owners. Start to use green appliances and provide discounts to have them installed in homes.

Lets start with building a larger Tourism Industry fo WA and create more larger green national parks and less destruction of biodiversity hot spots. Developers need to stop poaching top bio diversity hot spots! I can already name a few land developments going ahead in Busselton. The RAMSCAR Convention to protect all Wetlands. Stop Canel Development as this is not helping our environment.

Listed below is the overall impact that Unconventional gas mining will have on us all!!!

I oppose fracking in Australia.

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia. Also a proven link with man made earthquake has been established in the us

Although a city resident i frequently stay and work in various rural and remote areas. Reports across the USA about the ongoing effects of unconventional gas mining there, and from other countries are disturbing. Also I have witnessed local land holders' concerns about their livelihoods and fractured communities resulting from unconventional gas mining. And really, who wants unnecessary distressing respiratory health problems that occur with this gas mining?

Our national energy needs can instead be met with investments in renewable processes without the downstream negative effects to food, water and communities and with far less extraction of our much needed water. Added to that methane is not an issue as it is through unconventional gas mining. I am disappointed how in this industry investors and potential investors are not given accurate information on the widespread impacts of unconventional gas mining.

I find it hard to believe that a so called forward thinking country like Australia is still tied to a 19th century faith in fossil fuels, feeding these industries with obscene amounts of funding which should be going to the renewable energy sector.

Political will to acknowledge that we are heading in the wrong direction by considering this destructive system is paramount. Surely the recent news of Cape Town suffering from lack of water should alert us to this precious, and threatened, resource.

- WA is in short supply of water and is getting less and less why should be risk contaminating our underground water supplies for the future for a bit of money now.

I oppose fracking in Western Australia. Full stop.

- Unconventional gas mining and fracking is harmful to health. There are more and more cases of ill health as a result of fracking nearby and upstream of communities. Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses. Enough health concerns trouble us as we age however to have these inflicted on us due to the greed of multinational corporations is unjust.

- Unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders. Farmers suffer enough with what we humans have done to our earth contributing to climate change. I am from a rural Victorian town and over the years have hear so much about mental health issues and suicide by farmers who have endured too much suffering. This shatters communities even more.

- Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change. Rivers that light up when a match is put to the water surface? This is NOT NORMAL!
I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia for the sake of our generations and our future generations. Listen to the community that cares the most for our environment, our state, our indigenous communities and the livelihoods of all Western Australians.

I oppose Fracking in any state of Australia. I have seen first hand the damage and destruction it has on lives, land and health. We have family near Cloncurry Qld. Their water has been damaged, their air and our cousins are constantly sick. We have a small acreage, where we are trying to live and raise our children in a healthy environment. We grow our own organic food and use our own water. Fracking would destroy this dream for us. Poisoning our water our air. Once this starts there is no return to a healthy environment, we can't get back our natural wonders once they are destroyed our lives destroyed. This is not something we need in this country, in some areas it is too late. But we can stop now, so

Our family urges the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.

Even though I no longer live in WA, I oppose fracking in Western Australia. I have seen first hand what fracking can do to the environment and it is scary!

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia. It isn't necessary to go this way and it certainly isn't worth the destruction of that beautiful part of our country.

I oppose fracking in Western Australia as I feel it is harmful to people's health and affects our water table.

Fracking in Western Australia and the rest of the country and world is a downright dirty practice. It destroys the one precious resource that sustains life, which is water!!! If we poison our water ways and underground water table, on which W.A. is reliant, we won't be able to farm the land, run stock or live anywhere nearby without risk of falling sick and eventually dying. It is a terrible blight on the land and should be stopped now and banned from this country!

I would also urge anyone on the Panel who has or is expecting to have children and or grandchildren WHAT do you want to leave for them ?

We have set up our small acreage to be independent relying mainly on rainfall and bore water. Anything that could risk the quality of our water is not worth the risk. We also enjoy paddling down the Moore river and enjoying nature at its best, why risk this pristine environment.

Yes there is a nicely written submission below which I agree with 100% but I wanted to add something in my own words. It is madness to risk ground water in this country. For any reason. To risk it for some gas is nothing short of criminal. In such an arid country where ground water is so crucial there should be no need great enough to put it at risk. I have lived and worked out there in the bush and I can tell you that without that water, the country is lost. Please, I implore you to see common sense on this issue and put the future of our country ahead of some short term gains for a gas company.

I oppose fracking in Western Australia for all the reasons outlined here below. I travel to the south west of the state quite a lot and every time I drive past any sign which says Whicher I think of it being one of the world's 36 biodiversity hotspots with 7,500 plant species, many of which are found nowhere else in the world and cringe at the thought of the diesel still in the ground. I am so pleased that the wells there are to be decommissioned. Further:

I oppose fracking in Western Australia. I actually oppose fracking in part of Australia ! Please, please, please listen to us fracking is not justifiable in any shape . How can people have such short term vision ? How can this be allowed when the devastation is so blatantly obvious ?

I oppose fracking in Western Australia, I feel the short term profit is not worth the risk of long term damage to our environment, the soil, the air and our precious water supply.

I have been at a fracking protest outside the Casino approximately 12 months ago. The people attending are not radicalised environmentalists stirring trouble, Far from it, the majority were local landowners and members of the wider community concerned about the impact of gas fracking on their livelihood. Please listen to their concerns and take seriously their opposition to this damaging practice.

PERTH HAS ONE OF THE BIGGEST AQUAFERS IN THE WORLD. IS IT REALLY WORTH RISKING OUR MOST RELIABLE WATER SOURCES FOR A FEW TONES OF GAS?

I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia and if You look you will find a CEO of a fracking company sue another fracking company to stop them from fracking near his home so why should we when we all know it bad it destroys the land and the water can never be used for anything because it's is poison.

Thank you for your honest consideration of this extremely important matter.

I am opposed to fracking in anywhere in Australia. I think that the documented damage that this has already done to valuable agricultural land in Australia is outrageous. The damage that it can do to natural ecosystems and resources, such as water supplies is equally outrageous. It is beyond any genre of sensibility to so endanger and degrade the very stratum that we rely on, for the sake of multinational profit.

These are the facts concerning fracking, according to my information:

WA needs to move towards investing in renewable, sustainable energy solutions; not fund further old-fashioned finite energy extraction. Yes, the transition will take time, but this is not the answer. I urge the WA Government to look harder into better solutions.

As a former long time employee in the gas and oil exploration industry,I oppose fracking in Western Australia. In fact anywhere onshore.

Is it not obvious that our environment is under threat from all sorts of mining in Australia?? What about our water quality and quantity and the fact that climate change is limiting our unpredictable water/rain falls going forward. especially in the Kimberley where it is hot and dry for most of the year. What about the known destruction to parts of America where they have fracked the hell out of land and made the water toxic and undrinkable? What about the destruction to all lands as a result of raping our most valuable environment. Surely this is a questionable practice that should be stopped.

The only safe future for WA is to develop solar energy on a massive scale, reserving coal only for oil production for vehicles until solar battery technology improves to replace it.

I support managed Hydraulic Fracture Stimulation in Western Australia. I am a retired Petroleum Engineer and have designed and performed Hydraulic Fracture Stimulation (HFS) on Oil and Gas wells in Barrow Island and the North Sea.

- The benefits of enhanced production, which is the Primary objective of HFS are too often left in the background when investigating this technique. Also Enhanced Production results in less wells to be Drilled and much smaller Footprint on the Surface.
- When well managed, risks associated with HFS can be kept to as low as reasonably practicable. Of particular concern to me is the “one size fits all” approach by opponents. There are several situations where Risks are inherently low or zero and these should be treated accordingly. Deep, high integrity wells where stimulation is carried out well below any aquifer are an example. Compare this with shallow, close proximity sites with a significant footprint and you may see my point.
- Comparisons with for example the US are problematic. The Gas boom there has been strongly encouraged and, along with the different asset ownership regime (State and Individual) has resulted in a very poorly governed system with many operators taking short cuts to meet targeted production. As asset owner in WA the State Government is in the Box Seat to set and ensure compliance with a reasonable set of rules.
- Communities should have a seat at the Planning table and land owners should receive some compensation for the impact of development on their Property. This is an action for the Government to review regulations with Community and Industry input.
- Examples quoted from Queensland's recent experience are almost entirely related to Coal Seam Gas where unfortunately the Qld Government seem to have dropped the ball w/r to Governance. The sheer pace of development and the huge number of CSG wells seems to have over-whelmed resources there. This must not happen in WA!

I urge the inquiry to make recommendations to tailor the oversight of this industry to maximise the access of the WA community to cheap, reliable energy.

I oppose fracking in Western Australia because it will pollute and destroy our most precious resource – WATER!

We are delighted this inquiry is taking place and commend the government for calling it. We believe it gives the WA community an important opportunity to recognise that we now have much better sources of energy that make the extraction of unconventional gas unnecessary. The North-West Shelf is producing large amounts of gas at significant environmental cost.

WA has some of the best renewable resources in the world and is perfectly placed to become a renewable energy superpower that exports renewable electricity to Asia and liquid ammonia to the world. Renewable energy has none of the risks to health, water, farming and environment that are associated with unconventional gas.

And most importantly it will not contribute to global warming.

The international community is increasing its ambition under the Paris Agreement and as climate change accelerates most countries will be raising their emission reduction targets. More and more countries are pricing carbon and Australia will inevitably adopt one soon. This will make unconventional gas less viable and some wells risk becoming stranded assets.

WA has an opportunity to reduce its dependence on extractive industries and build more sustainable industries, such as renewable energy. This will have the added benefit of stabilising our economy and help end our boom-bust cycles. And by reducing our emissions we will slow global warming and reduce the damage that climate change itself will do to our economy, our people and our ecosystems.

As an evidence based and well published scientist, I totally oppose fracking in Western Australia.

Firstly, there is the impact on drinking water resources. The US EPA released their report into risks for impacts of fracking on drinking water resources in 2016. The report is reasonably damning. In conclusion the executive summary states: "factors that are more likely than others to result in more frequent or more severe impacts...include:

- Water withdrawals for hydraulic fracturing in times or areas of low water availability, particularly in areas with limited or declining groundwater resources;
- Spills during the management of hydraulic fracturing fluids and chemicals or produced water that result in large volumes or high concentrations of chemicals reaching groundwater resources;
- Injection of hydraulic fracturing fluids into wells with inadequate mechanical integrity, allowing gases or liquids to move to groundwater resources;
- Injection of hydraulic fracturing fluids directly into groundwater resources;
- Discharge of inadequately treated hydraulic fracturing wastewater to surface water resources; and
- Disposal or storage of hydraulic fracturing wastewater in unlined pits, resulting in contamination of groundwater resources."

The number 1 factor listed cannot be understated: "Water withdrawals for hydraulic fracturing in times or areas of low water availability, particularly in AREAS with LIMITED or declining GROUNDWATER RESOURCES. It is obvious that WA's vital and limited water resources would constitute a high risk factor under the EPA assessment. Our state is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. Our land and environment are under growing pressure from a lack of fresh water. We cannot afford to put our precious groundwater at risk either by contamination or depletion for a short term and

unnecessary fracking industry.

Secondly, it is highly likely that unconventional gas mining and fracking is harmful to health. A 2011 article in the journal, Human and Ecological Risk Assessment, examined the potential health impacts of oil and gas drilling in relation to the chemicals used during drilling, fracking, processing, and delivery of natural gas. The paper compiled a list of 632 chemicals (an incomplete list due to trade secrecy exemptions) identified from drilling operations throughout the U.S. The potential health risks due to exposure to these chemicals were detailed. It is thus not surprising that communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses consistent with the risks identified.

Thirdly, fracking poses a significant threat to global warming due to emissions of methane. Fourthly, WA has had a long history of ignoring and over-riding the ownership and wishes of Landholders and Traditional Owners, including massacring these people when it has suited in the 19th Century. We pay lip service to their country in the 21st Century but the Traditional Owners, those who so carefully cared for this precious land for over 40 000 years, don't have the right to refuse access to oil and gas companies in WA. This is inappropriate in the 21st Century.

There are also a raft of other reasons why fracking should never be considered during this state including:

limited economic benefit to the wider economy

destruction of local communities

reductions in farm productivity, efficiency, land values and credit availability to landholders etc.

However, the risk human health and disease alone (water availability and exposure to noxious chemicals) are so great that really no other considerations are required.

Reference: See <https://www.epa.gov/hfstudy/executive-summary-hydraulic-fracturing-study-final-assessment-2016>

I'm a big fan of a frack free Western Australia and world.

- Our water and land is precious to our farmers, our country and city dwellers
- Renewables have been shown to be the way ahead • We need strong leadership on this issue, we voted for strong leadership on this issue.

We look forward to your continued action and support for the future. We wish you all the best in this and courage to stand up where others have not.

- Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses. We know the dangers of chemicals/gases affecting ground water...no company can guarantee their process is 100% safe this the risk of leakage is high and totally unacceptable to the community.

- We cannot afford to put our precious groundwater at risk for a short term and unnecessary industry. Water sources available should be reserved for drinking water/household use and agriculture.

This affects friends/family in the areas where this has already taken place.

It's a crime to pollute our fresh water sources. We need clean water to sustain us, growing food using polluted water harms our health. We cannot risk releasing more toxic chemicals into our environment.

As a property owner in woodridge WA, 6041

There is enough evidence to easily see the real harm this does.

I am a concerned mother to 4 children in the South West of Western Australia and I feel very strongly about keeping our environment and our precious resource, water, in pristine condition. I have a responsibility as a parent to give my children a habitable future and preserve our beautiful South West for generations to come.

We have to start protecting ourselves and our planet, NOW.

I oppose fracking in Western Australia because:

- (1). it is not strategically vital since the resource obtained by it can be replaced by renewable forms of energy generation, and
- (2). It has been shown that in areas where fracking has already been implemented it has resulted in harm to the environment, individuals and the community, while ...
- (3). ... doing little or nothing at if not actually harming the general local economy.

Although I reside in Queensland I am against fracking therefore I strongly urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.

I oppose fracking in Western Australia due to the scientific and common sense that injecting chemicals into our ground represents an unacceptable risk of irreparably damaging our land and water.

Commercial companies do not carry the economic risk of future clean ups and therefore the economic models used to justify the viability of such projects fail to protect the environment, economy and health of current and future.

I am a resident of Woodridge WA 6041 in the Gingin district of WA.. I have lived here for the last 20 years... I came here to be near my family who also live in the an area close by... i came here for a healthier lifestyle, to live among the natural bushland that surrounds me in a neighbourhood where I have become part of a small community of residents who care deeply for our native environment and wish to protect it from all the damaging influences that threaten our native flora and fauna I wish to continue living here for the good of my health and have the area remain as it is....

I have long heard about the dangers of fracking as a method of mining gas and hoped it would never be approved here. Fracking can cause enormous harm to the environment and people – most importantly for me is the very real risk of our groundwater sources being contaminated. Water is precious in Western Australia as it is such a dry part of the country. Contamination of water resources simply cannot be allowed for the sake of the people and animals who rely on it. There is little that can be done once it happens and therefore in my opinion fracking is simply not worth it.

Please recommend that fracking be permanently banned in Western Australia.

I oppose fracking in Western Australia or anywhere. Clean water is something we must have To foul it with fracking chemicals would be criminal!

Once the damage is done it is much harder if not impossible to undo the damage.

Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change. THESE EMISSIONS FROM OLD LEAKY WELLS COULD CONTINUE FOR CENTURIES AND METHANE IS >100 TIMES MORE POTENT THAN CO2 IN GLOBAL WARMING POTENTIAL

Fracking imposes unnecessary risks on public health and our diminishing, yet most precious of resources – water.

The right to refuse access to oil and gas companies in WA by landholders and Traditional Owners is being denied and creates stress and leaves individuals and communities worried about their financial security and their ability to farm their land.

I live in a regional area where water is precious.

Why is it that the general population of Australia has to protest to the Government about such threatening industries such as Fracking when all scientific evidence and disastrous consequences have been proved in America AND in our own county (Queensland) Please remember that You the government are elected to represent the population of Australia and to protect us all, not subjecting our children and grandchildren to poisoning for the sake of multinational short time greed. As you can see below these disastrous results are what the government has allowed to happen when America had proved this had happened years ago. Shame on those responsible.

I do not believe that the benefits out way the risks. Friends in the Netherlands tell me unconventional gas extraction methods has resulted In subsidence effecting land and houses in an area that had had no previous history of earthquake activity.
I am concerned about the following points:

I have seen heartbreaking footage of the landscape after fracking and it is not earth/people/water friendly.

I strongly oppose fracking anywhere, let alone in Western Australia. This is my home and will be inherited by future generations. You do not have the right to pollute our pristine environment for short term gain. Your political agendas will come back to haunt you. Please take this seriously, as I assure you, we all do.

As with many forward-thinking European countries I embrace & support rapid devt. of renewablesources of energy in our country . I find it absolutely reprehensible that Govts in Australia, the sunniest landmass in the world, persist in developing fossil fuels. We could be at the cutting edge of the devt of renewables; but on the contrary, successive Govts have implemented policies that hamper & deter companies interested in developing this clean, cheap renewable fuel of the future, from pursuing their goal.

I'm a mother and grandmother. In my long life one thing I know for sure – our most precious resource is water – clean, uncontaminated water. We need it for the survival of not only humans, but the flora & fauna of our beautiful country. We need it for our agricultural lands to grow our food.

My hope is that fracking is permanently banned within our state. I believe that if it is allowed here in Western Australia, and if there is damage to our water & land, then class action should be taken against those individuals who permitted fracking to be allowed.

Yours sincerely Caroline Horobin Please consider those future generations whose survival rests with us.

I have recently returned to Canberra after living 6 years in regional Western Australia where I have a rental property and am paying off the mortgage.

While in WA I attended a number of events and watched films about the devastating health and livelihood experiences of farm owners in the USA.

You only need to look to Syria and the genesis of the war as being drought that drove the farmers into the cities. The scarcity of water is the world's next battlefield with the onset of climate change. Risking contamination of this vital resource for life, to sustain old forms of energy that contribute to climate change is not logical.

There are only a few places like the Kimberley left in the world. Soon they will have so much more value than anything that can be extracted from the ground – because as the human race we will have destroyed our environment. Listen to the Indigenous voices of this world – money and greed have pervaded every part of our lives. We are so brainwashed that we look down at the ground for sources of energy – when we should look up at the sky for renewable solar energy, especially in Australia! Nothing makes sense – the mining industry only gets the rich people richer. Having a look at the Pilbara, has mining improved the quality of life of people there? Not at all. In fact, it has made it worse, while rich people have pocketed millions again. Trickle-down economics doesn't exist. Individualism and capitalism are killing the planet where we all live. Indigenous people are the voices of reason: you cannot eat money. We have seen first hand the huge, visible, tangible impacts of fracking and unconventional gas extraction in America. Why would we want to do the same in our country?

I oppose fracking in Western Australia. because it is one of the more stupid ideas an industry has had ever. How far have we traveled as a species when a development such as this can even be considered? We in the North West of Western Australia rely solely on ground water for drinking. Why would we want to put that at risk of being contaminated by the chemicals used in Fracking? If Fracking goes ahead, it is not a question of if it will happen but when. Our state is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. Our land and environment are under growing pressure from a lack of fresh water. We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry.

Living in Broome, I am concerned that our groundwater will be poisoned by nearby fracking. Please do not allow this to happen. Permanently ban fracking in Western Australia, and the whole of Australia.

We have found out that two exploration permits have been given to Goshawk & Emerald on lakes south of Beagle Bay. We are feeling very upset because we harvest a fruit called gubinge (Kakadu plum) and other bush plants and our markets demand wild harvest. The land is Nyul Nyul traditional land. We have thousands of trees we harvest and care for all year round in tradition with the culture here. This culture is still alive and well in this country and we would like you to show respect for what has been here for thousands of years. We have 147 bird species, bilby sea life ancient sites and much loved country with a beautiful biodiversity and ancient aquifers. To take one thing and not consider everything else including the humans who live there and HUNT here is a crime against nature and humanity.

Our area floods nearly every year because the water rushes in to fill the lakes. Chemicals will poison the lakes and run down into the creeks where we get our food out to the reefs and oceans. We are 600m from the closest salt water creek. It's a no brainer there will be nothing left after the mining companies finish with it.

I am writing to voice my opposition to fracking in Western Australia due to its impacts on health, communities, water, farming, economy and the climate.
I will outline this below:

The problem you all face is that the public are completely aware of how destructive this mining technique is. So the only conclusion we can come to is that you're a bunch of sellouts if you even begin to entertain this as environmentally sound. It's just plain evil and complete lies.....

- Communities living near gasfields in Queensland and the USA have reported serious health effects following the commencement of unconventional gas operations. These arise from emissions from the fracking process to air, land & water as documented in the following American report.

- The most authoritative study of its kind reveals how fracking is contaminating the air and water – and imperiling the health of millions of Americans “Our examination...uncovered no evidence that fracking can be practiced in a manner that does not threaten human health,” states a blistering 266-page report released today by Concerned Health Professionals of New York and the Nobel Peace Prize-winning group, Physicians for Social Responsibility. Drawing on news investigations, government assessments and more than 1,200 peer-reviewed research articles, the study finds that fracking – shooting chemical-laden fluid into deep rock layers to release oil and gas – is poisoning the air, contaminating the water and imperiling the health of Americans across the country. “Fracking is the worst thing I've ever seen,” says Dr. Sandra Steingraber, one of the report's eight co-authors, a biologist who has worked as a public health advocate on issues like breast cancer and toxic incinerators. “Those of us in the public health sector started to realize years ago that there were potential risks, then the industry rolled out faster than we could do our science.” In recent years, the practice has expanded from rural lands to backyards, farms, and within sight of schools and sources of drinking water. “Now we see those risks have turned into human harms and people are getting sick,” says Steingraber. “And we in this field have a moral imperative to raise the alarm.”

RELATED

How a Small Town Is Standing Up to Fracking Grant Township, Pennsylvania, population 741, has become the front line of a radical new environmental movement – and they're not backing down The researchers behind the report, titled “Compendium of Scientific, Medical and Media Findings Demonstrating Risks and Harms of Fracking,” are quick to point out that fracking, or “unconventional oil and gas extraction,” extends far beyond the idea of a single well obediently

gurgling up natural gas or oil. Fracking is part of a complicated extraction process with a spider web of infrastructure that extends many miles from the well pad. At virtually every turn, the process contains public health hazards. Residents living near an active site breathe air laced with carcinogens, including benzene and formaldehyde, and research has shown an increased risk of asthma, a decrease in infant health and worrisome effects on the development of a fetus, such as preterm births and birth defects. "Pregnant women have a major risk, not only themselves but they're carrying a fetus whose cells are multiplying continuously," says Dr. Lynn Ringenberg, a retired Army colonel and the president-elect of Physicians for Social Responsibility. "If those cells get hit by some toxic chemical from fracking, it may not manifest itself for years."

Fracking sites have caught fire – others have exploded, as happened last month in Belmont County, Ohio – torching chemicals whose dangerous components local fire chiefs may be surprised to learn are an industry secret. Communities have long feared the fracking process can contaminate underground aquifers with hazardous chemicals and research in Texas and Pennsylvania has now confirmed this to be the case. Fracked gas flows via pipelines, whose leaks and explosions are now well-documented. Piped gas must continuously be re-pressurized at compressor stations which have been documented to emit methane, fine particulate matter, as well as benzene, formaldehyde and other known human carcinogens. Report co-author Dr. Kathleen Nolan, a pediatrician and bioethicist who has examined numerous people sickened by fracking-related contamination, describes the harrowing case of one western Pennsylvania family. "They would see a yellow fog, kind of like a chemical mist coming from the compressor station," says Nolan. "Their two youngest children, nine and 11, started having tics where their muscles would go into spasms, those spasms would persist even when they were asleep."

Then there's the issue of the waste that flows back up a fracked well. Although the industry calls it "brine" or "produced water," this material contains carcinogenic chemicals, can be flammable and, in much of the country, also contains radioactive elements from deep below the surface. Occasionally, this toxic waste is used to frack new wells. Often, it is hauled by trucks that must weave around narrow local roads to sites called injection wells, where this hazardous slurry is injected deep into the earth, a process that has repeatedly been linked to earthquakes. In 2016, in Barnesville, Ohio a truck spilled approximately 5,000 gallons of fracking wastewater when it crashed beside a stream that leads into one of the village's main reservoirs.

Frack pond in Big Spring Texas used by the fracking industry in the Permian Basin. In Big Spring citizens are limited in their water use due to drought conditions, though the fracking industry has no restrictions for their water usage. Julie Dermansky

Last November a truck carrying fracking waste overturned near Coolville, Ohio and emptied fluid into a culvert that connects to a creek. Residents were prepared; they'd been living for years with the menace of injection wells, including what resident Susie Quinn calls a "chemical factory like smell" around their homes. Like many in the region, she spends free time researching risks the industry and her own government have failed to protect her against. More than a week after the frack truck overturned, she visited the site to take samples, but forgot gloves. "About an hour and twenty minutes later all the fingers on my left hand were burning underneath my fingernails," says Quinn. Tests later revealed the culvert was loaded with barium, as well as strontium, whose isotopes can be radioactive. In West Virginia and Pennsylvania, radioactive fracking waste is being processed at facilities like Antero Clearwater in Doddridge County, West Virginia, which claims it can produce water clean enough to be discharged back into nearby local waterways. But Antero's website contains scant details on how this is done, and radioactivity experts, like Dr. Marvin Resnikoff, a nuclear physicist and international consultant on radioactive waste, remain concerned. "The radioactive levels at the Marcellus shale formation are off the charts," he says,

referring to the gas-rich layer that underlies much of West Virginia and Pennsylvania. "What is radioactive underground is still radioactive when it's brought to the surface," says Resnikoff. "This is not alchemy where radioactivity disappears." A tour last February with local residents through heavily-fracked Doddridge County revealed Antero's facility, located just six miles from Doddridge County High School, was emitting tremendous amounts of steam that drifted away in the wind. "There may be radioactive elements in the steam," says Resnikoff.

The "Harms of Fracking" report also highlights astonishing risks for an often overlooked group in the public health discussion on fracking: The workers. Fracking has created 1.7 million jobs, says the U.S. Chamber of Commerce, and the industry has potentially exposed workers on the ground to extremely dangerous conditions. "These are killing jobs," says report co-author Dr. Sandra Steingraber. "We have actually detected benzene in the urine of workers at levels known to raise the risks of leukemia." Dr. Pouné Saberi, a Philadelphia-based occupational and environmental medicine physician says workers face a wealth of risks, but their injuries rarely show up in the data, for a variety of reasons. They often work as non-unionized sub-contractors, allowing parent oil and gas companies to avoid reporting injuries, and the oil and gas industry is exempt from certain worker safety rules. Also, doctors and major Pennsylvania health care providers that service the industry, potentially a valuable source of worker data, says Saberi, rarely mention anything negative about fracking. "There is a code of silence that exists," she says. Plus, workers themselves rarely report injuries or hazards, for fear of losing their jobs.

"If you asked too many questions, you were labeled a tree-hugger and you were gone," says former fracking waste truck driver Randy Moyer, who describes his stomach-turning experience on a website called Shalefield Stories. "Every day was different," he writes. "Some days I'd carry mud, but most days I'd haul wastewater from fracked wells...It was an endless parade of trucks on those back roads." Moyer was never told the contents of the waste he was hauling. At the well-site, waste was kept in a makeshift pit, and when loading his truck Moyer often had to climb in and squeegee out material. To avoid getting their boots wet, "some guys would go in there in their bare feet." Moyer was given no safety gear, aside from a flame-resistant coat, because, he explains, "If the public sees guys in hazmat suits they're going to start to ask questions." As one would anticipate from a human being with direct exposure to radioactive waste, Moyer became quite sick.

Leaking Oil tanks in Kingsman County, Kansas. Julie Dermansky

"My tongue, lips, and limbs all swelled up," he writes. "I've had three teeth snap off. The first two broke while I was eating garlic bread and spaghetti. I have burning rashes all over my body that jump from place to place." Moyer has seen over 40 specialists across West Virginia and Pennsylvania. "One told me that I had bed bugs. Another said it must be a food allergy." The report, which is in its fifth edition, flips the narrative on an energy rush that is quite literally powering the nation. Fracking has "bolstered our economy and energy security" says Seth Whitehead, a consultant with Energy in Depth, a website affiliated with the Independent Petroleum Association of America. The numbers bear out: Fossil fuels supply the U.S. with a majority of its electricity, and gas has overtaken coal as America's number one power source. Meanwhile, about 60 percent of the gas produced in America and 48 percent of the oil now comes from unconventional oil and gas deposits. Fracking has helped ease America off foreign fossil fuels. And the boom extends far beyond the well pads. Ethane, one of many components in fracked gas, serves as the base ingredient for the production of numerous plastics and petrochemicals. On the Gulf Coast, these industries are making big investments in infrastructure to take advantage of America's newly abundant cheap gas. "With more than \$35 billion in planned chemical plant expansions in our area over the next five years, these are the 'good old days,'" Chad Burke, President of the Economic Alliance Houston Ship Channel Region, posted on the organization's website. The American Chemistry Council bullishly estimates that over the next

decade the plastics industry will generate over 300,000 jobs. "The surge of natural gas production from shale has reversed the fortunes of the U.S. plastics industry," states a 2015 Council report. But these glowing numbers rarely take into account the fracking boom's epic toll on public health, the American landscape and the world's climate. In fact, against a mounting pile of personal testimony and scientific data, the industry continues to claim it is doing nothing wrong. "The science clearly indicates that, with an emphasis on prevention...energy production can and is being done right, and that hydraulic fracturing is not leading to widespread, systemic effects to drinking water resources," Stephanie Wissman, an Executive Director with the American Petroleum Institute, stated at a recent meeting of the Delaware River Basin Commission. "It's sad," Marcellus Shale Coalition spokesperson Erica Clayton Wright wrote in an email, "that some shoddy so-called 'studies' focused on attacking American energy and the tens of thousands of hardworking Pennsylvanians that work across the industry are the subject of fake news stories like these." But the science on fracking is getting more difficult to dismiss. "With fracking," says Steingraber, "we had six peer reviewed articles in 2009 pointing to possible public health risks. By 2011 we had 42. Now there are more than 1200." Some states are indeed listening to the scientists. New York, Maryland and Vermont have banned fracking, and even Florida's state legislature is seriously considering a ban. "The chickens are going to come home to roost," says Ted Auch, an environmental scientist with FracTracker Alliance. He believes that as negative impacts on health and water supplies continue to stack up, the fracking industry will have an increasingly difficult time gaining investors, an issue highlighted in a December article in the Wall Street Journal. "Shale has been a lousy bet for most investors," the article states, referring to the deposits where fracking typically occurs. Within the past decade, says the Journal article, "energy companies...have spent \$280 billion more than they generated from operations on shale investments."

As a result, many companies have taken extreme measures to politically protect their investments. Last month, Wyoming became the third state, after Iowa and Ohio, to introduce a bill criminalizing protest activities like the ones undertaken at Standing Rock. "It is a war," says Tina Smusz, a retired emergency medicine and palliative care physician and Virginia-based member of Physicians for Social Responsibility. "And in this war one of your most valuable weapons is science."

I wish to voice my opposition to fracking in Western Australia.

It's unacceptable to assume we have the right to leave the kind of environmental footprint fracking is responsible for, let alone to expect people to believe that they aren't being put at risk by it.

I'm tired of hearing that 'risks can be mitigated' as though this is meant to be as acceptable an outcome as it being avoided all together by simply not fracking. Promises to mitigate risks can't be backed up with certainty and these promises are being dished out to try and shove fracking approvals through communities across the country who don't want it or are oblivious to it. I'm hugely disappointed that our government isn't above selling the beautiful and fragile country that we depend on out for a quick dollar. Or smart enough to acknowledge the financial ramifications of the aftermath of fracking (environmental and health damages). I don't need to be an economist to see that Australia won't come out ahead in the end by going down the path of fracking. What's left afterwards? Would you want to live on land being fracked? Raise children near gas extraction sites? Rely on water sources impacted by fracking? Or watch helplessly as your single biggest investment (and the home you cherish) plummets without event the power to prevent the people causing the damage from entering your property? I know I don't want this anywhere in Australia let alone my backyard and I have no idea how anyone who isn't just seeing dollar signs would.

Unconventional gas mining and fracking is both harmful to health and dangerous to the environment. I urge you to ban fracking and unconventional gas mining permanently in Western Australia. Our water and land is precious and our peoples health is at risk. There is so much evidence to support the damaging effects of fracking. If fracking is allowed in Western Australia I am afraid for the future of our state.

The excessive water use as well as the chemicals used in Fracking places a huge risk on Western Australia's ground water. We do not have enough water to risk contaminating what we have. Western Australia is a dry state and we need all the water we have. And we need it uncontaminated.

Landholders not having the right of refusal to a gas company is extremely worrying for many people living in rural and semi rural areas. Including myself in a rural location. Please consider how it would feel to have your home taken over by a gas mining company and the toxic by products contaminating your land and water. There is risk for ground water on a large scale if fracking is allowed. But also on a personal level the impact felt would be magnified as it would feel very personal and as if the land owner has no rights. Which under the current law seems to be true. How can this be ok in a progressive country?

Unconventional gas fields in Queensland have led to a decrease in land values as well as farm productivity. Western Australia has a large agricultural sector and this cannot be put at risk from a short term industry like fracking. The land and water must be uncontaminated to allow for food production to continue without contamination in Western Australia.

I strongly urge the Panel to ban fracking and all unconventional gas mining in Western Australia. Please put our state, our water, our land and our people ahead of money and the mining companies desires.

We have enough gas for many years, will we have enough water for our children. Please support our environment for us and our children. Fracking has already polluted so many water supplies in Qld, don't let it happen in WA. Please put the good before profit, when we all leave this planet we don't take our money, we leave behind what we achieved.

I was born in Port Hedland and lived there until I was 27. I spent those 27 years holidaying in and around the Pilbara and the Kimberley and still have most of my family living there who we visit regularly.

I am 100% NOT ok with fracking, not in the Pilbara, Kimberley, WA, or anywhere in Australia or on planet earth.

The benefits (flowing mainly to private companies) do not in any measure outweigh the risks – to human health, to aquifers on which we depend for drinking water, to agricultural land.

I live in North West NSW where we are threatened by the coal seam gas industrialisation of bushland and farmland

It has been shown by Dr Gerralyn McCarron in Queensland, that where fracking is carried there are serious quantifiable impacts on the health of the people who live in the area as well as those employed in the industry. These include increases in asthma, nose bleeds, skin conditions and neurological illnesses, leading to greater numbers of hospital visits than prior to the industry. Large quantities of unreported fugitive emissions contribute to these problems.

The industry is prioritised over the human and legal rights of locals. These stresses on affected communities lead to increasing mental health problems, including suicides.

Once the water is extracted or used in fracking it is permanently contaminated, a major disqualifier for the industry in such a dry state.

And finally, it's just not an economic proposition. A small number of investors may make a lot of money but the rest of us pay the price with reduction in land values, rehabilitation of affected land, reconstruction of dislocated communities in the boom and bust cycle.

I am a community member and not a member of any particular political or environmental group.

I oppose fracking in Western Australia due to the extraction process posing a serious public and environmental hazard. The widespread and world-wide opposition to such a process being allowed to negatively affect rural communities – and the often already compromised natural environments that they rely – must be heeded. The ostensible short term value created by any fracking would almost certainly be greatly outweighed by the deleterious and destructive effects left behind after the extraction is complete. This has been shown to be true in many cases world-wide. Hence, the only way to ensure that the already fragile economic, social and environmental systems and communities that exist in rural WA remain so, is to strongly oppose this insidious industry.

I have been out in the community asking all walks of life what they think about the gas fracking industry and I have not actually found anyone that thinks it is a good idea or needed. Most people have said the same thing that it is a no brainer. Terrible for the environment and way too risky for our water security.

- Landholders Custodians and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. This creates stress and leaves individuals and communities worried about their financial security and their ability to farm their land. The cards are stacked unfairly in favour of the gas industry and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation.

I have a bush block backing on to the Moore River in the shire of Dandaragan. I bought this block to enjoy a clean and peaceful environment and to retire to in a few years. I need clean water for our orchard which we are trying to establish and for our bees which we are also trying to establish.

My husband and I are career intensive farmers growing mangoes, melons, sweetcorn, cucurbits and other lines on 102 acres on the locality 'Yardarino AA' Lot 250 situated in Irwin WA, and we live within viewing distance of one of less than 10 'slickwater hydraulically fractured' wells in WA, that well having been drilled directly through the Allanoooka water basin which is the source of our much needed water. The 'fracked' Corybas well is only 1000 metres from our farm

I do not like the process of fracking and request that you disallow, permanently, this practice in WA.

i want a total BAN on fracking legislated by parliament to protect our entire state and much required water supply that enables us to grow crops of fresh food to supply the people of WA. Water is the most important NATURAL RESOURCE in the WORLD, it is irreplaceable, and it is the most important resource to sustain life on this planet. it is not right that oil and gas companies can enter onto ours' or any other land, whether it be privately, community owned, or lands under the guardianship of indigenous people, without those landowners or custodians having the rights of veto to stop such unwanted access and place this all at risk just to make money for shareholders.

We have been the victims of oil and gas companies in the past, and view fracking as the most invasive technology to be introduced to advance the extraction of gas, and being a member of F.A.I.R. (Fracking Awareness Irwin Region), which with the co-operation of Lock the Gate, have surveyed the residents of Irwin with the resounding indication of 97.7% that residents are against fracking. This is a clear indication that we do not give social license to oil and gas companies to operate in our neighbourhood, and moreover ALL communities across WA that have been surveyed about their acceptance of 'fracking' in their community have indicated a resounding vote of NO., with ALL votes above 95%.

it is time that we put aside, though very relevant, the scientific argument, and listen to the people who make up these communities and give them the support to advance their lives without the bullying that oil and gas companies are renowned for. i would like to detail those bullying tactics, but at this time due to confidentiality, can not, but i believe there is a time fast approaching where it can all be laid out for everyone to make their own judgement.

Renewable energy is the way of the future and it is my belief that mankind should put away ALL the means of which we will cause irreversible harm to the planet of Earth, and use our vast knowledge and wealth, to explore and develop programs that will not make the planet a more dangerous place to live than what it is now. Solar, wind and wave technology, along with storage batteries have to be developed and installed to provide us with a source of energy other than burning fossil fuels. .

I cannot see the point in another enquiry or scientific study if else where in Australia and the world fracking has been found to be unsafe.

I have lived in Broome for more than 30 years and have a vested interest in my community and its supporting industries.

Mining is not what Broome and surrounds should have as it's major industry. Tourism has sustained the community for decades and with increasing interest in the Kimberley within Australia and internationally a gas industry is likely to have a detrimental effect on the business, social and environmental fabric of the region. We have seen what 50 years of mining has done to the Pilbara region of WA and the community has made a firm stance against this kind of future for Broome in its opposition to the proposed gas refinery at James Price Point where the community was surveyed and it was found that 78% of the community were against it.

The Kimberley region of WA is the only place in Australia where there have been marsupial extinctions and possibly no plant extinctions as well. Our drinking water comes from the ground and it is not worth the risk of contamination. The fragile nature of the Kimberley is no place for a dying fossil fuel industry.

I have seen first hand the damage it does to country.. dead birds and wildlife drinking from the tailing dams. I have seen leaking wells just left. I have heard the stories/lies buru n their partners tell .. I have children.. do you think I would support anything bad .. it makes me sick. Ask yourself why has every developing country in the world banned it???

Wake up .. it' can't always be about the short term gain .. you can't reverse the damage once it's done .. please be a bit more educated and don't believe the lies mining companies spin you!!

My name is Barb and I am a resident of Falcon in Mandurah WA. One of the current Exploration Leases, Lease 480, is approximately 20 kms from my home which includes the Yalgorup National Park. In January 2018 it was announced, more than 1000ha of Class A conservation reserve will be added to Yalgorup National Park. Whilst I welcome the conservation reserve plan, the threat of gas mining is still hanging over the park and surrounding lease areas.

The expansion was announced by the Environment Minister Stephen Dawson. Mr. Dawson said the move was part of the State Government's plan to to increase protection of threatened species and ecological communities through the expansion of the formal reserve system.

The park's value as a conservation area is being compromised by the gas exploration lease. The park contains the internationally recognized Peel-Yalgorup wetlands that provided habitat for migratory shorebirds species as well as resident species. Living rock-like structures known as thrombolites have formed on the edges of Lake Clifton, and can be viewed from a boardwalk. The most striking things about the thrombolites are their limestone colour and rounded shape.

The thrombolite-building micro-organisms are too small for the human eye to see and resemble the earliest forms of life on Earth. The discovery of modern examples helped scientists to understand the significance of micro-organisms in the environment and unravel the long history of life on Earth.

Scientists know little about the thrombolites and why they form at Lake Clifton, but one theory is that they form because the lake is associated with upwellings of fresh groundwater that is high in calcium carbonate. The micro-organisms living in this environment are able to precipitate calcium

carbonate from the waters as they photosynthesise, forming the mineralised structure that is the thrombolite.

Lake Clifton's thrombolites are very fragile, so an observation walkway has been built for visitors to enjoy these incredible formations while protecting them from damage.

I want the Government's decision to expand the National Park and to ensure it is protected from land developers but I want them to act to also protect it from the onshore gas industry. Please ensure our safe future in the ways we know we can. You, respectfully, the Panel, are able to help protect our beautiful country and it's people by saying NO to this industry. Thank you, from the bottom of my heart for this.

Therefore, I call on the Independent Scientific Panel Inquiry to recommend a permanent, legislated ban on fracking and unconventional gas activities across WA, and to recommend the development of renewable energy resources to meet the state's energy needs.

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I am a resident of Falcon WA and my area borders on the Yalgorup National Park which has been earmarked for unconventional gas drilling. (ref Mandurah Coastal Times Wednesday January 16th 2018) I would like to put a case forward for continuing the existing moratorium on unconventional gas drilling and to actually ban the practice as I believe that this State (and country) needs to be focussing on the future and committing to renewable sources of energy rather than continuing to develop and rely on new fossil fuel fields. Western Australia can lead the world in solar and wind power generation as well as having abundant minerals for long life battery storage development. Why go down a path that could lead to environmental degradation when we can foster industries that will help the planet to become a better place?

As a Senior Registered Nurse I urge the inquiry to make a recommendation to permanently ban fracking and all unconventional gas mining in Western Australia.

We moved to the Kimberley for its beauty and the health of its water and lack of pollution. We and many others are waiting to see if the fracking goes ahead and if it does we'll unfortunately leave. We don't want damaged water ways in such a fragile area weather wise. It's too dangerous. I oppose fracking in Western Australia –

Why risk our precious ground water and climate with this dangerous and toxic industry?

I live in woodridge which is located in the Moore River Region. What a beautiful place to bring up 4 nature loving children, teaching them to appreciate and respect mother earth and her wonderful gifts.. I have always protected the environment where I can and the more I have learnt about fracking and the negative impact it has on the water, air, environment and the livelihood of people the more it sickens me that our government would even consider letting this happen in W.A. Air pollution, loss of large areas of farmland, contamination of underground water, toxic waste water, the list goes on. There is NO WAY you can tell people this is a safe practise. A market gardener was telling me within 6 months of the wells going down in N.S.W his family's potato farm was poisoned. All crops dying and he could set his water on fire. YES 6 MONTHS. This is before we even get to the huge amount of water it takes to just get these wells down. 11-34 million ltrs for just one well. Aren't we meant to be reducing and preserving our most precious resource. There are alternatives to gas, there are no alternatives to water. The fact we do not even need unconventional gas with all the huge surpluses of conventional gas available is just crazy. What good is a government if it doesn't listen to its people. These numbers say it all. The percentages AGAINST fracking in the surveyed communities. BRUNSWICK 93.9% NORTH BOYANUP 97.5% THE VINES 98.8% CARAMAH 96.8% GREENHEAD 95.6% DANDARGAN 96.4% CHITTERING 99.4% GREENOUGH 96.2% EXMOUTH 98.3% IRVIN RIVER 97.7% QUENJINUP 90.7% STRATHAM 98.7% CERVANTES 93% STIRLING 97.8%

That is a huge response to NO we don't want it. I think it's time to stop looking at the \$\$\$\$ signs and start looking at a healthy future for our land, water and all Australians. As my daughter said "If we know it's bad mum why don't they (meaning government and gas companies) or are they just pretending not to know.. The wise words of an eight yr old

I have worked as an educator in the Kimberley for over 30 years. I oppose fracking in Western Australia.

Large scale industrial development does little to enhance the social fabric of the local community. Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. Local people stand to lose a lot if their movement across traditional land is impeded by security details, pipes, trucking and all the infrastructure and fly in/fly out personnel that goes with the oil and gas industry.

Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy.

I would like the inquiry to recommend permanently banning fracking and all unconventional gas mining in Western Australia.

As a WA business owner and resident I strongly oppose fracking in Western Australia. We know that unconventional gas mining and fracking is harmful to health. The impact on the health of communities living near gasfields makes it unconscionable to proceed with further development of this style of mining.

WA relies on our groundwater supplies, and anything that puts these supplies at risk must be avoided. As a business owner in the Swan Valley this is of real concern to both me and my fellow business owners in the region. We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry. Unconventional gasfields in Queensland have seen reductions in farm productivity, efficiency, land values and credit availability to landholders. This must be avoided at all costs in WA.

The people of Western Australia are against fracking and unconventional gas mining. The vast majority of Western Australians are keen to see resources go towards developing our state's future with renewable energy, especially given our bounteous resources of sun, wind and waves. To allow the fracking industry to continue in WA would be a gross betrayal of the will of the people for the gain of the privileged few.

Please think our children, think of health and wellbeing over dollars. This is an opportunity to do the right thing by the community and the environment, make it your priority to be a voice of reason. We only get one earth. Lets use it wisely!!!!

We come from an agricultural background previously living in Rural WA and know that the effects on groundwater are going to last longer than living memory (for generations to come) and allowing Fracking will constitute an assault on agriculture, livestock, and the viability of townships that depend on groundwater that inevitably will be contaminated at some point if fracking is allowed anywhere where shared water resources exist. Please don't consign our beautiful state to a long lost memory.

I appreciate the opportunity to make a submission on The Independent Scientific Panel Inquiry into Hydraulic Fracture Simulation. I am part of the Jurien action group who are also part of a Australia wide action groups who are against Hydraulic Fracturing.

Our town ran a Survey to see how many people were against Fracking ,the town site of Jurien Bay was surveyed with More than 90% of the community we surveyed were Against Hydraulic Fracturing, this was back in 2016.

We as a community believe that if there is any risk to our Aquifers from contamination from hydraulic fracturing then we Should Definitely Ban Fracking State-wide in Western Australia. there is too many dangerous chemicals used in the industry that would cause major damage to the Natural surroundings especially the Pinnacles & the Mt Lesueur national park and surrounding flora and fauna that will be at risk to these dangerous chemicals also the risk to Our Human health that will also be at risk to these chemicals here is an insert from a study into the dangerous chemicals that are used and the Natural effects on human health risk from fracking. the link below shows where I got my information from its On Page 6 of 12

Please find below a insert from a document that shows the dangers:

Human exposure can occur through direct skin contact with the chemicals or wastes; drinking or bathing in contaminated water (surface, bore/well); by breathing in vapors from flowback, evaporation ponds or stored wastes; and through contaminated dust particulates. There are many incidents of communities reporting adverse human and animal health impacts. A Human Health Risk Assessment of air emissions around US UG activities⁴¹ concluded that residents closest to well pads i.e., living less than 1/2 mile from wells, have higher risks for respiratory and neurological effects based on their exposure to air pollutants; and a higher excess lifetime risk for cancer. The study took 163 measurements from fixed monitoring station, 24 samples from perimeter of well pads (130-500 feet from center) undergoing well completion and measured ambient air hydrocarbon emissions. Emissions measured by the fence line at well completion were statistically higher ($p \leq 0.05$) than emissions at the fixed location station (inc. benzene, toluene, and several alkanes.) The assessment was based on the US EPA guidance to estimate non-cancer and cancer risks for residents living greater than 1/2 mile from wells and residents living equal to or less than a 1/2 mile from wells. The study may have underestimated risks to human health as it did not measure ozone or particulates. USEPA methods may also underestimate health risks of mixed exposures. http://www.ntn.org.au/wp/wp-content/uploads/2013/04/UCgas_report-April-2013.pdf

We as majority of our local community DON'T WANT HYDRAULIC FRACTURING ANYWHERE IN WESTERN AUSTRALIA ,WITHOUT WATER OUR ENTIRE EXISTENCE IS AT RISK . there is so many more instances that are all the proof that the fracking enquiry need to understand that our land can not be destroyed by this dangerous way of getting old school fossil fuels out of the ground. there is so many better options especially using renewable energy like that is already happening in Our local shire of Dandaragan .. thanking you Jurien action Group / frack free Jurien bay

When considering the need to have a community input to debate the issue of Fracking I am somewhat happy to have the opportunity to be heard, but also somewhat flabbergasted at the idea that there is even a need to 'weigh the issues' to make a determination, when one can easily see and know the destructive effect of Fracking - especially to nation like Australia that is dependent on scant water reserves, with neither the capacity to supply the water required to engage in the practice of Fracking, or the fallback water reserves that could somehow allow our aquifers to be contaminated without causing catastrophe either immediately, or in the sickness plagued future of those exposed.

Many arguments have been put forward to support Fracking in this state - alleging economic benefits, workforce benefits, etc but none of these arguments 'hold water' when considering the Fracking industry in the USA or Queensland. The economic case is brief, with a benefit to the few initially engaging in Fracking, and even that not for long as Fracking generally requires a net input of financial support to keep operating, and in a land with huge gas reserves of conventional gas - the economic case stacks up even worse than those regions having a shortage of energy. Workforce gains benefit only a few and generally at the initial phase of exploration.

The legacy of releasing methane and toxic chemicals from the ground, and injecting thousands of chemical toxins into the ground has a capacity for a toxic and generational legacy with unbound costs on medical care, loss of land value, loss of land values, loss of populations of both humans and animals etc that could turn Australia (our home) into a wasteland. So why is Fracking even considered? Even if coated with enough spin to attempt to make it initially palatable to the residents of this state?

There is one case that I have considered and dare to mention to the panel, and to my parliamentary representatives - a case for Fracking has economic gains - for the few - but at an extreme cost to the general public. That is the deliberate contamination of the water resources of this state to permanently damage: marine parks, wildlife, national parks, state parks, and townships; to enable a carte-blanche removal of park status and removal of populations of residents to enable carte-blanche access to the states mineral resources. This would constitute a strategic strike on the viability of agriculture, townships, and protected areas to remove the roadblocks to development and exploitation of these resources - at the cost of the land, finances, health and viability of the citizens affected.

The argument sounds extreme, but the general process has been used before - especially in the cases of Native Americans and other indigenous groups. Anything from deliberate smallpox exposure, to the removal of settlements when mineral resources were detected. So the idea is not new - and one that could be considered by men without a conscience.

I ask that the Independent Scientific Panel also look at the inquiry in the light of strategic exploitation, and the willingness of a few that would gamble the: health, life, and future; of Australian citizens, in the race to exploit resources for profit. This is technically a suggestion of treason in the making for companies and individuals behind Fracking and other risky exploits that would consider deliberately contaminating water resources, at the opportunity cost of future generations and Australia as we know it.

Even if there is a gas field there – why do you have to tap into it at the risk of massive damage to the special environment we have here especially in the SW?

The SW of Western Australia is one of the few environmental “hot spots” that survived the ice age. Simple greed may be the one thing that destroys it. This nation is wealthy enough, and educated enough, to leave well enough alone.

Hands off.

I oppose fracking any where in Western Australia.

You owe this to our children and grandchildren who need to inherit a country fit to live in.

*** for all of the above reasons**** Please please stop. I understand that the monopoly of money and power entailed in that has its pushing points. But my mental health is directly tied to that of the land... its killing my soul and will to live in a world where we as a species are smart enough to achieve what we want to with minimal to no environmental impact, yet we choose the option based on a few getting ahead at the expense of every other person and species.

Please just stop :(

I oppose all onshore gas mining in Western Australia.

I want a total onshore gas field ban in or near our agriculture lands, aquifers, lakes, rivers, streams, underground water table, towns, national parks or indigenous sacred sites. That is the only way to go, they do not have social licence to extract gas onshore. I do not want my farm, home and town in Harvey being turned into an industrial park.

We purchased our farm in Harvey for the lifestyle and clean living, we have our apiary here because the South West of WA is a very unique place on the planet where the bees don't have the pests and disease like everywhere else plus we have very special flora. Our South West is a treasure trove for our bees and bee keepers. The world needs to help the bees not take their healthy environment away from them.

We also produce beef that we sell to provide food for Australia, we free range our chickens, we drink our rain water and that's all we have to drink, there is no back up water coming from the city. My children play here. This is too serious to take chances with our agricultural lands, our air, human and animal health and our water.

We know from the studies and experience of people around the world that, not only do wells, pipes and other infrastructure leak, but the ground may also be leaking through cracks and fissures. Fugitive methane emissions are strong indicators of the presence of toxic gasses such as sulphur oxide, nitrogen oxide and volatile organic compounds. It is devastating for human health and the environment. We live on EP 416 and we are right on top of a fault line. Yet we still have the threat of industrial gas field on our farm and the farmland around us.

Our land and environment are under growing pressure from a lack of fresh water. We cannot afford to put our precious groundwater at risk for a short term and unnecessary onshore gas industry.

All the experience around the world shows that people and gasfields should not mix.

I urge the inquiry to make a recommendation to permanently ban Onshore gas mining in Western Australia.

I would like to see a total ban of unconventional gas mining and Fracking in Western Australia. . My Father and Grand Father cleared and farmed this land in Central Greenough starting back in the 1930s. So it was a proud moment back in 2015 when 94.6% of Central Greenough declared ourselves to be Western Australia's first frack free community. This day and age we should be using sustainable energy to power this great country of ours.

There is insufficient government regulation of this industry. Based in the experienced of other countries like the US we already know that unless sufficient safeguards are put in place:

- we are risking long term environmental and human health due to Water and chemical use and wastewater production from fracking, a short term energy so-called “solution”. Fracking places WA’s vital water resources at risk from contamination and depletion. Our state is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. Our land and environment are under growing pressure from a lack of fresh water. We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry.
- Our future is in your hands. The cards are stacked unfairly in favour of the gas industry that is largely under-regulated, and human rights are being ignored. All this for a resource that is no longer strategically vital. It can be replaced by renewable forms of energy generation. You have the power to put the controls in place. By making brave decisions to protect the purity of that which is essential to human and all life on this planet.
- the argument that we need this kind of development to create jobs is a spurious one: Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; unless your skills were those required by the short term labour needs; few additional local job opportunities; and limited economic benefit to the wider economy.

I'm writing to register my opinion on fracking in WA.

I can't oppose it enough. And all of my friends and family feel the same way.

As a 26 year old, I have hopes of living for another 50 odd years. In that time I'd really appreciate it if the environment around me would actually continue to be there. The continual defunding of environmental programs and studies has been a backbone of the Coalition's strategy to cut costs, and my heart bleeds for the millions of species that will die out and never return as a result. How can I live happily in this country knowing that my children may never see all of the animals and plants I know and love? How can I live with myself knowing I let this happen? And yet, fracking continues to be an open possibility, because any chance to fill the oil, gas and mining industry's pockets with money is fair game.

Please be fair to those of us who want to live in Australia, and who want to believe that the Australia we share with our children one day will still be the Australia we know and love. Please have respect for the life that lives here and cannot speak for itself. Please have respect for people who want to live in the beautiful, unspoiled land this is.

I STRONGLY oppose fracking anywhere in Western Australia.

- It has been proven through US studies and also anecdotally in Australia, that unconventional gas mining and fracking is harmful to health.
- We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry.

Not only that, but the process of Fracking and Unconventional Gas Mining uses vast amounts of water which we cannot afford to waste in the name of destabilising the structure of the earth's crust by underground explosions which fractures soil composition.

- Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. WHY NOT? Surely that is a breach of their rights, in particular the traditional owners who have a special link to the land through their Dreamtime beliefs. It would be like someone going into public cemeteries and tearing up the ground looking for minerals etc. Not having these rights creates stress and leaves individuals and communities worried about their financial security and their ability to farm THEIR land. The cards are stacked unfairly in favour of the gas industry, and human rights are being ignored for a resource that is no longer strategically vital as it can be replaced by renewable forms of energy generation. Why are we hell bent on allowing this destructive process in a pristine country many millions of years old which has stood the test of time until the advent of human invasion? WHY?
- Research into the economic and social impacts of the unconventional gas industry in Queensland has shown that the industry has led to a reduction in community well-being and social cohesion. It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy. Are you Listening?
- Fracking leads to large deliberate and fugitive emissions of methane, adding to climate change. We cannot afford to add more weight to the Climate Change story as it is already at a critical mass.

I have lived here since my birth almost 62 years ago and I am a 5th generation Caucasian Australian. I have produced the 6th and 7th generation of my family, and we love the earth in its natural state. I am totally opposed to any form of mining in this country that seeks Fossil fuels including gas, because we have the technology and the capacity to produce cleaner, more efficient forms of natural power by using those things the Earth has given us to our benefit ie sun, wind, waves etc.

Please, do the RIGHT thing, and not the thing that produces financial gains for a small portion of the state/overseas and forgets the rights of all Australians to say NO to regressive policies and practices.

Any activity that poses a serious health risk to the public should not be considered, no matter the financial gain. Something that could potentially interfere with the ground water should be outlawed altogether.

- Due to recent advances in hydrogen fuel cell technology to begin another fracking operation would be a financial and an environmental disaster. Let our souls remember the fate of our Great Barrier Reef, please.

I oppose fracking in Western Australia, and have seen what it has done in other parts of Australia such as Queensland. Please do not let it happen here in WA. We do not want or need it..

- We cannot afford to put our precious groundwater at risk for a short term and unnecessary fracking industry. It saw pollution of prime agricultural land and water in qld. Please look at the evidence and speak to these farmers.
- Landholders and Traditional Owners should have the right to refuse access to oil and gas companies in WA.
- It also caused a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy. It caused major stress to landowners and communities who suffered as a result of fracking on and near their land. Cattle died, causing more stress and some landowners no longer had fresh access to water.

Please take this submission on board. Please help preserve our future.

I've been near a gas well drilling rig. It's not pretty. Worse than the RC drillers I've seen pouring diesel down drillholes to free up stuck rods. If most of the wells are going to fail, how can anyone say yes to fracking? Cos it's not their land, they haven't been out there and they don't feel sick when they hear about the damage to the water table, the animals, plants and peoples livelihood.

This Fracking is morally corrupt and un-bloody sustainable.

There's this thing called renewable energy! How about spending some money on that energy companies?

I oppose fracking in Western Australia and the entire world. NO AMOUNT OF MONEY IS WORTH THE DEVESTATION FRACKING BRINGS. Maybe make the people who earn the profit from fracking to drink water that has been contaminated due to a failed mine. And give it to there children and other family members. There would be your answer if it was actually safe. I find it pathetic and utterly frustrating that such an obviously horrid outdated method of mining could even be considered. Get your act together, government.

Apart from being the Mid West/Gascoyne/Swan coordinator for Lock the Gate Alliance, I'm obviously personally concerned how this will affect my friends and family, our air, water, land, and regional economies, the social fabric of regional communities, and the climate.

I grew up across regional and remote Western Australia and knowing this industry, with it's spacial intensity when it gets to commercial levels, would devastate all of those area (the Kimberley, Murchison, Perth metro and South West). My parents run a caravan park in Nannup, and if unconventional gasfields were allowed to expand in that region, it would devastate existing industries like tourism and agriculture.

I oppose fracking and unconventional gasfields in Western Australia, and these are just some of my reasons.

It is certainly not beneficial or needed in three face of better options and its harmful effects.

• Unconventional gas mining and fracking is harmful to health (conditions include respiratory ailments, nose throat and eye irritations and neurological illnesses).

• WA is one of the driest places on earth and climate change is already leading to decreased rainfall in southern WA. WITHOUT WATER WE WILL DIE.

• Landholders and Traditional Owners don't have the right to refuse access to oil and gas companies in WA. This creates stress and leaves individuals and communities worried about their financial security and their ability to farm their land. HUMAN RIGHTS ARE NOT AN ABSTRACT TERM, BUT A RIGHT.

Permanently ban fracking and all unconventional gas mining in Western Australia: it is the only ethical decision.

I worked in the oil and gas industry for 25 years, including fracking in Queensland. I oppose fracking in Western Australia. I understand the differences between CSG in Queensland and the tight fields here in WA. I believe development of the WA fields may well be more harmful and riskier than those on the east coast, especially in the medium to longer term.

I urge you to listen to the public ahead of plans that will be irreversible once started. Water is fast becoming more valuable a commodity, so to damage that commodity for short term gain would be irresponsible. Please listen to the community – we will all be affected.

Due to contamination of the limited water resources.

Because it is not good for the environment.

Environmental destruction
Against the direction of renewable energy pathway

Protect our water resources, once these are lost they are never regained.
We need a future for our children

I am a health worker and my understanding of the problem of fracking impinge on many facets of both human and other life. For the few dollars we receive today we pay millions to clear up in the future.

Water, air and land cannot be polluted like this! There is another way to mine gas!

Fracking is way too dangerous and creates more pollution than any other service

DRINKING WATER PRESERVATION.

Environmental vandalism, we need to preserve the water and environmental diversity that we have left.

Disgusting. Just leave us alone - it's our home.
How dare you
Think of our WATER - you don't live here - we do

UNNESSASARY

COZ ITS STUPID & BESIDES YOU PROMISED NOT TO!

Absolutely spoils our environment both visually and health wise. Multinationals seem to be the dictators of our very lives. STOP THIS NOW!!!

"sucks"

Absolutely

WA is already short on clean drinking water! Please don't ruin our AAA rating with poluted water.

I oppose unconventional gas mining and fracking in Western Australia. Honestly, instead of being the butt of the joke and the "Wait Awhile" state, lets be innovative for a change and ban this abhorrence of a practice before it is too late. Too late for the environment and our health, we have renewable energy and this fuel is not required for the domestic market. Please don't let the greed of a few ruin our pristine state, we can promote tourism and farming – don't make WA a wasteland.