

Gasfield Free Dean Marsh & Bamba
Community Group
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Department of Environment and Planning
Parliament House
Spring Street
Melbourne 3002

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To the Chairperson and Members of the Committee

Thank you for the opportunity to present a submission to the parliamentary inquiry into onshore unconventional gas in Victoria.

This submission is written on behalf of the Gasfield Free Deans Marsh and Bamba community, situated 90 minutes west of Melbourne, and inland from Lorne. We are a community group that formed in response to applications for exploratory licences for both unconventional gas and coal drilling in our area. We were the first community in Western Victoria to declare ourselves "Gasfield Free".

Overwhelmingly, our community does not want this industry. Volunteers door-knocked on each of the 264 households in our postcode (3235) and interviewed 490 people in Deans Marsh and Bamba, asking them the simple question "Do you want a gasfield in our area?" - 95.5% said "No".

We live in a beautiful part of the eastern Otways, where we have highly productive land with dairy, beef, wine, olives, timber, fruit growing and tourism contributing to a vibrant and prosperous community. We cannot see any benefits of allowing the industry to proceed. We are not anti-progress, but there are so many negative impacts in environmental, social, health and economic terms that to risk them for short term profits seems irresponsible.

Gas drilling industrialises our farming land, risks the quality of our water and air, risks our health, and risks agriculture's need for clean water and soils. We risk our tourism industry, and perhaps most importantly, we risk our communities. And this long-term risk is for short-term gain.

Importantly there is no social justice in rural populations shouldering the entire burden of risk in an industry that will produce revenue for all Victorians, and jobs for only a few.

The haste with which the industry is urging governments to push through approvals indicates an eagerness for short-term gains without proper Environmental Impact Assessments and Health Impact Assessments. There is no reason to rush the approval of the industry, particularly when so much is unknown about its impacts. The gas is not going anywhere.

We call for an indefinite extension to the moratorium, and look forward to the total ban of the gas drilling industry in Victoria, as more evidence of its adverse affects in other Australian states and the US unfolds.

We would like to address each of the terms of reference briefly:

TOR (1) the prospectivity of Victoria's geology for commercial sources of onshore unconventional gas;

There is no evidence that Victoria is running out of gas. The Australian energy Market Operator predicts no supply gaps in short medium or long term. The International Energy Agency research indicates an oversupply.

<http://www.aemo.com.au/Gas/Planning/Gas-Statement-of-Opportunities>
<http://www.afr.com/news/special-reports/australia-energy-future/energy-sector-needs-to-temper-expectations-20150624-ghv1az>

Secondly, Victoria's gas needs are decreasing in response to:

- cheaper renewables, better technology
- increasing commercial and domestic awareness of climate change and investment in renewables
- reduced domestic use in response to higher gas prices
- a downturn in manufacturing
- a downturn in industrial use of gas

[http://www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/5cae9d5a1e58fac6ca257df50017ff52/\\$FILE/The dash for gas. Could demand in NSW fall to half.PDF](http://www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/5cae9d5a1e58fac6ca257df50017ff52/$FILE/The%20dash%20for%20gas.%20Could%20demand%20in%20NSW%20fall%20to%20half.PDF)

TOR (2) the environmental, land productivity and public health risks, risk mitigations and residual risks of onshore unconventional gas activities;

Risks to water quality

Every stage of gas drilling involves the use of products containing chemicals. Many chemicals are undisclosed, and of those that are known, many have known harmful affects. Chemicals have the potential to contaminate aquifers, and when pumped back out of the well, have the potential to contaminate drinking water, stock water, and agricultural land.

Flooding, spillover and damage to containment walls has occurred on many occasions. Water in the Pilaga Forest was found to have uranium 20 times the safe drinking level at a Santos gas project. AGL's gas well at Gloucester was shut down after BTEX chemicals were found in the holding tanks.

In the US, more than 1000 cases of contamination linked to fracking have been documented by state officials.

Risks to water quantity

There is no baseline data on how much water is contained in Australian aquifers, so there is no information on their resilience. Australia is the driest continent on earth. To risk our water to an industry that consumes staggering amounts of water and produces water containing poisonous chemicals seems foolhardy in the extreme.

Risks to air quality

95% of studies by PSE Healthy energy finds that shale gas development increases air pollution from gas leaks around the well head, holding tanks, ponds and from emissions from trucks and fuel fired machinery. This is industrialization of a rural landscape.

Methane pollution from leaking gas wellheads, venting and flaring activity is a major source of greenhouse gas emissions. Ground level ozone can also increase due to methane leaks which can damage trees and crops.

Risks to public health

No studies have been done on long-term exposure to low dose toxins used in gas drilling and fracking, or to the volatile compounds and hydrocarbons released to the air. Health impairments could remain hidden for decades and span generations. Exposure to asbestos may result in illness 40 years later. Long term effects on children are especially worrying.

Increasingly, scientific studies on the gas industry demonstrate adverse health affects. For example, a study of 22,000 infants in Colorado has shown an increase in babies with congenital heart defects in mothers living within 10 mile radius of gaswells. <http://ehp.niehs.nih.gov/wp-content/uploads/122/4/ehp.1306722.pdf>

In the short term, we know that exposure to methane and chemicals can cause respiratory and skin problems, and more generalized symptoms have been well documented in people living near gas wells.

<http://ehp.niehs.nih.gov/wp-content/uploads/advpub/2014/9/ehp.1307732.pdf>
<http://www.tandfonline.com/doi/abs/10.1080/10807039.2011.605662>

Psychological and social issues

Communities in Queensland and NSW have experienced the Boom and Bust nature of UG drilling. Both positive and negative impacts make a permanent change to the nature and fabric of a community. House prices may rise, some businesses may fail while others profit. Jobs are short-term, and Fly-In-Fly-Out contracts rarely benefits the local population. <http://www.abc.net.au/landline/content/2015/s4263145.htm> (broadcast on June 28 2015)

There is a deep mistrust of the gas industry, fostered by the “spin” to which communities have been exposed both recently and historically. Unsubstantiated reassurances of a safe industry appear patronising and paternalistic. Central to this mistrust is an ideological divide: mining companies whose bottom line is financial; and rural communities, to whom the bottom line is so much more - caring for our land and preserving it for future generations.

Communities fear promises broken and responsibilities shirked. Assurances of regulation and adherence to regulations are no guarantee. We have witnessed Big Business avoiding responsibilities. We have seen footage of James Hardie in court using legal tricks against men dying of asbestosis. We have seen footage of tobacco industry executives flatly denying links between cigarettes and cancer. In July 2015, the owners of Hazelwood (a foreign owned company) refused to pay an \$18 million bill for the firefighting effort to stop a massive fire at their brown coal mine.

<http://www.theage.com.au/victoria/hazelwood-owners-gdf-suez-refusing-to-pay-18-million-mine-fire-bill-20150706-gi6e6y.html>

Once contamination has occurred it cannot be undone, and there is no trust that gas drilling companies will accept responsibilities in cleanup and compensation. Small drilling companies may go bankrupt – bond money may be inadequate. Even when Santos was found responsible for a holding pond containing dangerous levels of uranium, the company was quick to shift blame to the previous gas drilling company.

<http://www.smh.com.au/environment/santos-coal-seam-gas-project-contaminating-aquifer-in-use-after-two-years-20140310-34h9f.html>

Any negative legacy the gas industry leaves to our communities could be difficult or impossible to manage, and will belong to us forever.

- . **(3) the coexistence of onshore unconventional gas activities with existing land and water uses, including —**
- . **(a) agricultural production and domestic and export market requirements;**

On June 22nd 2015, the Minister for Agriculture, Jaala Pulford, reinforced the Labor government’s commitment to put agriculture and support for rural communities at the heart of regional Victoria. The food and fibre industry is worth \$11 billion, and relies on water and healthy soils for its productivity. This is surely at odds with establishing an industry into regional Victoria, that risks water and soil quality, degrades viable farming land (see the Darling Downs and the Hunter Valley) and fractures communities.

The \$3 billion Victorian Dairy Industry especially relies on its “Clean and Green” image both domestically and overseas. Any contamination, or perception of contamination by its consumers will have grave impacts on the industry.

(b) the legal rights of property owners and the impact on property values; and

Minerals and gas are owned by the State and landholders cannot legally deny access to exploration and drilling. Our community has come together in our joint concern about the unfairness of these laws.

Once a property is marked for unconventional gas, at exploration stage or production stage, the impact on property values is devastating. For most people their home is their greatest asset, and such devaluation threatens their overall financial security. In addition, those who make their living on the land, risk their entire economic survival.

(c) any implications for local and regional development, investment and jobs;

Much is made of the ability of the gas industry to create jobs. However, there is a great social injustice in valuing the jobs of a few over the livelihoods, farms and communities of many.

A need for skilled jobs in construction and plant operation can draw workers away from other industries. Rather than creating jobs, other industries lose workers and suffer a downturn. They may have invested in training their workers but cannot compete against better wages.

The gas industry is not a big employer. The Australian Bureau of Statistics measures jobs in both the oil and gas industry together as employing 0.2% of the Australian workforce. The gas industry overestimates its job figures by including indirect jobs. For example, Santos has claimed that a CSG project in NSW would create 570 public sector jobs for a small plant that employed 30 people.

Many jobs are temporary, especially those for unskilled workers, and don't provide any job security for local residents. Skilled workers are employed from overseas and interstate.

(4) the ability of potential onshore unconventional gas resources contributing to the State's overall energy sources including —
(a) an ability to provide a competitive source of energy and non energy inputs for Victorian industries;

The export orientation of the market arrangements for natural gas in Australia is seen to expose the domestic market to international price movements, with no guarantee that onshore natural gas production will deliver lower prices in Victoria. Certainly since NSW has begun exporting gas to Asian markets, prices have doubled and tripled for the domestic market.

The notion that onshore natural gas should be further developed is challenged on the basis that existing reserves are adequate for at least 30 years and this allows sufficient time for government to redirect resources to renewable energy sources, thus helping to mitigate climate change effects.

. **(c) carbon dioxide emissions from these sources;**

China, the US, the EU, the UN and even the Pope have strongly stated the imperative to reduce our reliance on fossil fuels.

Inevitably, at some time in the future, the Australian government will begin to address climate change in a way that is reflective of our place in the world as a progressive responsible educated nation.

Fossil fuels need to be left in the ground.

Unless we do this, our children and grandchildren will be facing a very different world.

More prosaically, falling demand both domestically and internationally increases the likelihood of any gas industry infrastructure becoming a stranded asset.

(5) the resource knowledge requirements and policy and regulatory safeguards that would be necessary to enable exploration and development of onshore unconventional gas resources, including —

- . **(a) further scientific work to inform the effective regulation of an onshore unconventional gas industry, including the role of industry and government, particularly in relation to rigorous monitoring and enforcement, and the effectiveness of impact mitigation responses; and**

No amount of legislation, regulation, safeguards will prevent accidents, spills, casing failures, floods, fires, leakages, human error, road traffic accidents, inadvertent exposure to toxic chemicals etc.

Hazlewood coal mine is a cautionary tale.

(6) relevant domestic and international reviews and inquiries covering the management of risks for similar industries including, but not limited to, the Victorian Auditor- General Office's report *Unconventional Gas: Managing Risks and Impacts* (contingent upon this report being presented to Parliament) and other reports generated by the Victorian community and stakeholder engagement programs.

The following legislatures have banned, or have a moratorium on the UG industry: New York State <http://rt.com/usa/270562-new-york-fracking-ban/>, Pennsylvania, Washington, Maryland, Vermont, counties in Colorado, Ohio, Washington, California and Texas. And in Europe, France, Germany, Spain, Scotland, Wales and many others. <http://keptapwatersafe.org/global-bans-on-fracking/>

Conclusion

As with demonstrating the safety of any new technology or drugs, the onus is on the industry to demonstrate its safety, not the public. The mechanism for harm is clear – a list of dangerous chemicals, including heavy metals and carcinogens, are pumped through a well that passes through aquifers. Contaminated waste water is pumped to the surface, with potential to enter the food chain. Gaseous emissions from well heads, leaks and flares cause damage to health and contribute to climate change.

As it stands, the public is participating, without consent, in a large experiment to see whether fracking poses a health hazard. The timescale of this experiment may be decades, as was the case with asbestos and tobacco, when cancers emerge many years after exposure.

We have the opportunity to benefit from the research currently being done in the US and Europe. Several large-scale health impact studies are being undertaken in the US, for which we need to wait for at least the preliminary results.

Potential revenue for the Victorian government will be offset by damage to our existing industries, especially agriculture and tourism, and long-term health, environmental and social costs. Short term financial gains are not the most important consideration as we work to benefit all Victorians.

There is no rush to introduce this industry. Victoria's gas needs are falling and we have enough gas for the medium to long-term. And the world is changing. Globally, there are great opportunities in renewables, and governments are slowly realizing the folly of continuing to burn fossil fuels.

Please ban UG drilling in Victoria.

Yours faithfully,
Elizabeth Bashford
On behalf of the Gasfield Free Deans Marsh and Bambra

**WE DECLARE
THAT DEANS MARSH AND BAMBRA ARE GASFIELD FREE
PROTECTED BY THE WILL OF THE COMMUNITY**

Overwhelmingly, through consultation and engagement, the Deans Marsh and Bambra communities have indicated that we want to remain Coal Seam Gas Free and all Unconventional Gas Field Free.

In this 3235 Deans Marsh postcode we have fertile soils, steady rains and pure water. We also have residents and ratepayers dedicated to protecting these valuable assets, not only for this community, but for those in the future who will continue to farm the land and respect the environment that sustains us all.

We want the water in our aquifers, wetlands, rivers and water catchments to remain pure and drinkable for plants, animals and people. We want to continue to produce the best beef, lamb, oil, wine and dairy products from uncontaminated Otway soils. Our clean air and pastoral landscapes continue to attract urban and city dwellers keen to draw in the restorative powers of our stunning forests, fields and oceans.

We stand together as a community against gas field industrialization. Our fight is not against progress but against those who do not see and do not value what we do, and the land in our care. The currency of our environmental assets is too valuable to risk for a process that 264 households and 490 people surveyed throughout Deans Marsh & Bambra (over 95.5%) do not want.

THE DEANS MARSH AND BAMBRA DECLARATION
We will not grieve in the future for a present we can protect now.