Briefing

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Rights, regulations and fracking in WA:
How the regulatory system for unconventional gas fails to protect people and the environment.

The Government of Western Australia is energetically promoting unconventional gas and fracking across the State, including granting substantial exploration licences in the Kimberley, Mid-West and South West regions. These licences cover large areas of the aquifers that supply the Perth metro and South West areas with water, as well as national parks, tourist icons, productive farmland and Aboriginal lands.

This has provoked growing concern from communities alarmed at the social, health and environmental impacts fracking has had in the US in particular, and raised questions about the effectiveness of government regulations over the industry here in WA.

This briefing summarises a number of fundamental weaknesses in current WA fracking regulations, including in areas of environmental protection, groundwater, and community and landholder rights. Until significant changes are made, WA communities and landholders targeted by the industry will justifiably feel unprotected by the regulations around fracking and unconventional gas.

Regulations governing fracking and unconventional gas in WA

In Western Australia, gas is considered to be a 'strategic resource', regulated under the *Petroleum and Geothermal Energy Resources Act 1967* by the Department of Mines and Petroleum (DMP).

The WA Government and the unconventional gas (UG) and fracking industry repeatedly claim WA's gas fracking regulations are robust and amongst the world's strongest. These claims do not stand up to scrutiny.

In fact the regulations for unconventional gas and fracking in WA are designed to make it as easy as possible for the industry. Meanwhile landholders have few rights, environmental protection is at best an afterthought and transparency and community consultation are virtually non-existent.

The process of fracking – drilling holes and pumping toxic chemicals into the Earth under pressure – is by definition a polluting activity. For this reason all over the world the industry can only operate where exempted from pollution control regulations that apply to other industries.

Environmental Impact Assessment not required for UG and fracking

Western Australia's environmental laws set out a process of Environmental Impact Assessment (EIA) for proposals or activities that cause significant impacts or harm to the environment. However decisions as to which projects are assessed, and at what level of scrutiny, are at the discretion of WA's primary environmental watchdog, the Environmental Protection Authority (EPA).

Frack Free Future is a collection of individuals, communities, farmers, doctors, environmentalists, business and civil society groups concerned at the risks fracking poses to Western Australia's water sources, climate, and sustainable industries like farming and tourism. Together we're fighting for a Frack Free Future for WA. For more information visit www.frackfreefuture.org.au or email info@frackfreefuture.org.au.

To date there has been no formal EIA of any fracking activities by the EPA. This is despite referrals of fracking proposals to the EPA, and thousands of submissions from community members asking them to conduct assessments of fracking activities.

This suggests political pressure on the EPA to resist conducting EIAs for fracking in WA.

Very large commercial scale fracking projects could still be subject to EIAs. However it is highly likely that a series of exploration fracking wells, such as we are already seeing in the Mid-West, would not be subject to EIA without a change of government policy.

What's 'environmentally significant' enough to warrant EPA assessment?

In early 2015 the EPA issued a statement saying there would be no EIA required for exploration fracking – no matter how many wells. This was despite exploration fracking wells being exactly the same as production wells, and exploration programs often involving drilling and fracking multiple wells. After CCWA pointed out this potentially broke the law, they retracted that policy and issued a new one saying they'd only assess fracking if they deemed it 'environmentally significant'.

But how does the EIA decide what's 'environmentally significant?'

In its current guidance statement on environmental significance the EPA says if another government agency, for example the DMP, is regulating an activity then it won't be considered to be environmentally significant, and therefore won't require an EIA. This is regardless of whether the other regulating agency is actually effective in or committed to protecting the environment.

We could therefore see the development of gas fields by stealth, progressing a few wells at a time, with no assessment of the cumulative impacts.

Pollution control regulations do not apply to UG and fracking

Fracking operations in WA have been exempt from the normal pollution control regulations that apply to other industries under the *Environmental Protection Act 1984*. Other polluting industries in WA, including piggeries, mine tailings dams and incinerators, are listed as 'prescribed premises' requiring pollution control licenses. Fracking is not covered under this list of 'prescribed premises' and so does not require such a license.

Fracking and UG companies choose their own environmental standards

The WA system for regulating UG and fracking is one of 'self regulation'. Companies conduct their own risk assessment, develop their own Environmental Management Plans (EMPs), and undertake their own environmental monitoring and compliance reporting. There are few government compliance officers, and no independent monitoring is undertaken by the government. It's no surprise an independent review[1] commissioned by the WA Government revealed EMPs to be "legally unenforceable".

When it comes to stopping companies from harming the environment, the DMP simply requires companies keep the risk of their operations 'As Low as Reasonably Practicable' (ALARP). This is the key underpinning principle of the DMP's regulatory approach, but it places no real limit on a gas company's environmental impact.

Instead it allows companies to define the level of acceptable risk and impact simply according to how much they are willing to spend on environmental protection. As an environmental standard, the principle of ALARP is meaningless and unenforceable.

[1] Hunter, T (2011) *Regulation of Shale, Coal Seam and Tight Gas Activities in Western Australia*, Faculty of Law, Bond University

Fracking companies cannot be prosecuted if they pollute the environment

Pollution is an offence under the *Environmental Protection Act 1984*. However, the Department of Environmental Regulation has advised in writing that fracking companies cannot be prosecuted for pollution if the activities are authorized by the DMP. This is because the DMP fracking license gives companies a legal 'defence' against any charges of pollution.

Commonwealth water protection measures don't apply to UG and fracking in WA

Gas fracking in WA is exempt from Commonwealth legislation that requires assessment of groundwater impacts from coal seam gas and coal mining proposals. The 'water trigger' in the Commonwealth legislation only applies to coal seam gas and coalmines, not shale or tight gas fracking, which is what is planned across vast areas of WA.

Groundwater quality standards are lacking

There is no single government agency in WA responsible for protecting groundwater quality, and no common groundwater quality standards in place across the state. For the majority of groundwater areas, including those supplying drinking water, no enforceable water quality standards apply at all.

Bores that are used to supply drinking water for towns are often protected by a 500m buffer zone, but there is little protection for the groundwater these bores draw water from. For example fracking has been approved in drinking water catchments for town bore fields, such as the Drover well in the Mid-west. Private groundwater bores such as those on farms have no protection from fracking.

An unlined fracking waste water pond at the Arrowsmith well, in Mid-West WA. Photo credit: Dane Griffin, 2012

Fracking do not pay for the vast volumes of water they use

Rights to access and use groundwater in WA are allocated to fracking companies on a 'first come, first served' basis with no consideration given to the future needs of communities, agriculture or other industries. Fracking and UG companies do not pay for the water they use in fracking operations, even though each well can use between ten and 60 million litres of water[2].

Critical information is withheld from the public

Almost all information relating to gas fracking activities is considered to be 'commercial in confidence', hiding it away from the public, landholders and even Members of Parliament. This secrecy covers the following types of information:

- groundwater monitoring data
- Air quality monitoring data
- well integrity data and monitoring results

[2] Source: United States Geological Survey. https://www2.usgs.gov/faq/node/3824

This means landholders cannot access information about environmental impacts and water quality on their own land unless this information is voluntarily disclosed by the fracking company. In such cases the landholder is usually bound by non-disclosure clauses in their Land Access Agreements which prevent them from publicly disclosing this information.

Health impacts of fracking and fracking chemicals not assessed

No health impact assessment is required for gas fracking under WA legislation, and no baseline health studies are required in communities before fracking is approved. This makes it is very difficult to explore connections between fracking and any future health impacts, should such impacts occur.

WA does require companies to disclose the list of chemicals used in fracking. However, hardly any of the chemicals used in fracking operations have been assessed by chemical safety regulator the National Industrial Chemicals Notification and Assessment Scheme (NICNAS).

And little is known about the 'synergistic' effects of these chemicals – how they behave when mixed with other natural and introduced chemicals in a high pressure, high temperature environment. Many of the chemicals used overseas are proven to be toxic or potentially toxic to humans and animals.

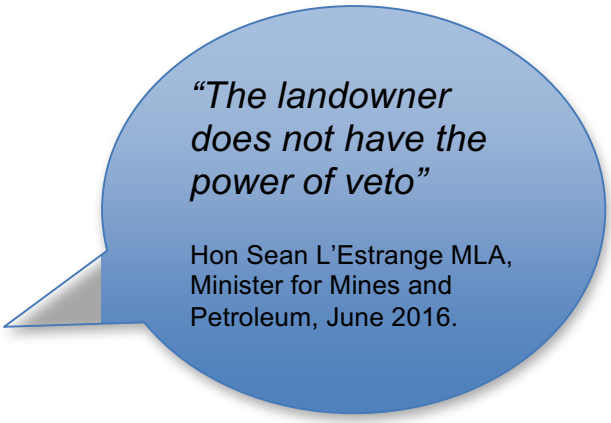
Benzene, for example, is highly toxic even in very low (> 1 ppb) concentrations. Whilst it and other 'BTEX' chemicals are prohibited from use in WA, they are naturally present in hydrocarbon deposits and are therefore present in 'produced' wastewater from fracking operations. These, and other chemicals, are typically left in open-air holding ponds for storage or to evaporate. The evaporation of these chemicals causes pollution of surrounding air with highly toxic 'volatile organic compounds' (VOCs) evaporating at the same time as the water.

Petroleum leases are issued with no consultation or community rights to object

Unlike mining, where community and landholders can object to the issuing of mining leases under the mining Act, there are no such rights for community under the Petroleum Act.

Petroleum exploration leases are issued by the DMP with no process to consult or even notify the community, affected landholders or businesses. These leases are issued over large areas, regardless of the underlying land use. The Leases cover private land, crown land, national parks, conservation reserves and Native Title lands. No assessment of existing land use is conducted by the DMP prior to issuing the leases.

Similarly, drilling, fracking and other licenses are issued with no independent consultation process and no rights for the community or landholders to object. The DMP may require gas companies to undertake community consultation; however the conduct of these companies has often been described as deceptive and misleading.



Landowners have no right of veto[3]

In WA law, underground petroleum resources, including gas, are the property of the state, not the landholder. Petroleum titles are issued under the Petroleum and Geothermal Resources (PGER) Act to provide the right to petroleum companies to explore for, and develop, petroleum resources.

This usually requires access to private lands. Unlike minerals, which are governed under separate legislation, petroleum resources are considered to be 'strategic resources'. This means that whilst

[3] For more information see "DMP Petroleum information sheet. Land use and access" www.dmp.wa.gov.au/shaleandtightgas

landowners can prevent the development of mineral resources on their land, they have no such right to prevent the development of gas resources. If a company needs to access your land to drill for gas, it can apply to a Magistrates Court to grant permission, even if you refuse.

However, before going via the courts a gas company must spend at least three months trying to make a Land Access Agreement with the landowner. After three months the PGER Act provides that the matter shall be settled by a court, which can impose a Land Access Agreement and determine an appropriate compensation figure.

There are some exceptions to this for very small properties such as residential land holdings, cemeteries, or some other 'improvements' to land. The PGER Act provides a right of refusal for access to private land by a petroleum title holder where:

- the freehold title is less than 2000 square metres in area
- the land is used as a cemetery or burial place
- the land is within 150 metres of a cemetery or burial place, substantial improvement, or reservoir.

Limited compensation may be payable to landowners

Gas companies may have to pay for impacts to property, but there are exceptions. Whether agreed voluntarily with the landowner or imposed by a court, the Land Access Agreement should include compensation to the landholder for any impacts to "improvements" to the land. This would include impacts to roads, fences, dam structures, or pasture.

However compensation is not payable for impacts to groundwater or surface water: private landholders have no rights over these resources.

A fracked well flaring excess gas. As well as contributing to climate change, fracking releases toxic chemicals to ground and surface water, air and surrounding land.

Worse still for holders of leasehold land and Native Title Land, the DMP states[4] "*pastoral leases, grazing leases and leases for the use and benefit of Aboriginal inhabitants are not considered private land*", meaning compensation "*is not payable to the lessee for being deprived of the land, any damage to the land, severance of the land or rights-of-way easements*".

No minimum setback distance

Under the DMP's current regulations there is no minimum setback or buffer distance separating fracking wells, pipelines and other UG activity from homes, schools, parks etc. The DMP say they will judge this on a 'case-by-case' basis however no minimum setback distances apply.

Greenhouse gas pollution not measured or reported

One of the most concerning impacts of UG and fracking is the release of the powerful greenhouse gas methane into the atmosphere. Uncontrolled release of 'fugitive' methane during flow testing of gas wells and resulting from leaks is common. However there are no regulations in place in Western Australia to limit the release of methane, and methane release does not have to be reported under

[4] DMP Petroleum Information Sheet. Land use and access. http://www.dmp.wa.gov.au/Documents/Petroleum/PD-SBD-NST-105D.pdf

the National Greenhouse Gas and Energy Reporting Scheme (NGGERS). As a consequence the vast contribution of the industry to greenhouse gas emissions is not measured or reported.

The Regulator – the DMP – has a conflict of interest

The same regulator tasked with 'protecting communities and the environment' – the Department of Mines and Petroleum – is also tasked with actively encouraging development of unconventional gas and fracking across the state. This presents a conflict of interest.

The DMP provides grants and financial assistance to gas companies under the Royalties for Regions funded Exploration Incentive Scheme (EIS). There have been numerous examples where the DMP has worked with the industry in a coordinated public relations exercise to promote fracking across the state. The DMP Executive Director, Petroleum is a member of the World Shale Council – an industry funded group with the objective of promoting gas fracking around the world.

The DMP is not an independent regulator that can be trusted to protect the people, heritage and environment of WA from the impacts of the fracking and unconventional gas industry.

What are politicians saying about fracking regulations and land access rights?

Despite the lack of a veto right, the DMP, gas industry and some politicians continue to claim landowners have strong rights to protect their properties from gas companies. They also claim – against all the evidence – that WA has a strong regulatory framework to control the industry.

Currently the WA Labor and Liberal parties oppose veto rights for landholders, though the WA Nationals recently committed to supporting veto rights for private landholders and have called for an independent commission to regulate the fracking industry in WA[5]. Labor is committed to a statewide moratorium[6] and an immediate permanent ban in the South West, Peel and metro regions, and the Greens have called for fracking and UG bans[7].

The WA Government has also ignored[8] key recommendations of the recent Parliamentary Inquiry into Unconventional Gas[9]. The Inquiry identified the lack of a veto right a fundamental inequity between farmers and gas companies. It didn't recommend veto rights but did call for a statutory process governing negotiations between gas companies and landholders.

What needs to change?

The Frack Free Future campaign is calling on politicians and companies to ensure the people of Western Australia, as well as our water sources, food, heritage and beautiful places, are protected from the fracking and unconventional gas industry. There are a range of measures that can help achieve that, including strengthening regulations and veto rights, protecting sensitive areas, and implementing regional no-go zones and bans on dangerous activities and industries.

As more and more people join Frack Free Future and similar campaigns the pressure is growing on politicians and other decision-makers to listen and act.

For more information contact Jules Kirby at jules@frackfreefuture.org.au.

[5] http://www.pressreader.com/australia/augusta-margaret-river-times/20160624/281633894536519
[6] WA Labor Platform 2015 http://walabor.org.au/download/WALaborPlatform2015.pdf
[7] For example see http://greens.org.au/beyond-coal-and-gas and http://scott-ludlam.greensmps.org.au/sites/default/files/fracking_flier.pdf
[8] http://www.abc.net.au/news/2016-03-17/wa-government-ignores-key-fracking-recommendation/7255160
[9] Environment and Public Affairs Committee, Inquiry into the implications of Hydraulic Fracturing for unconventional gas (p77). http://www.dmp.wa.gov.au/Documents/Petroleum/Report42-HydraulicFracturing_UnconventionalGas.pdf