

## Submission to Victorian Parliamentary Inquiry on Onshore Unconventional Gas Mining

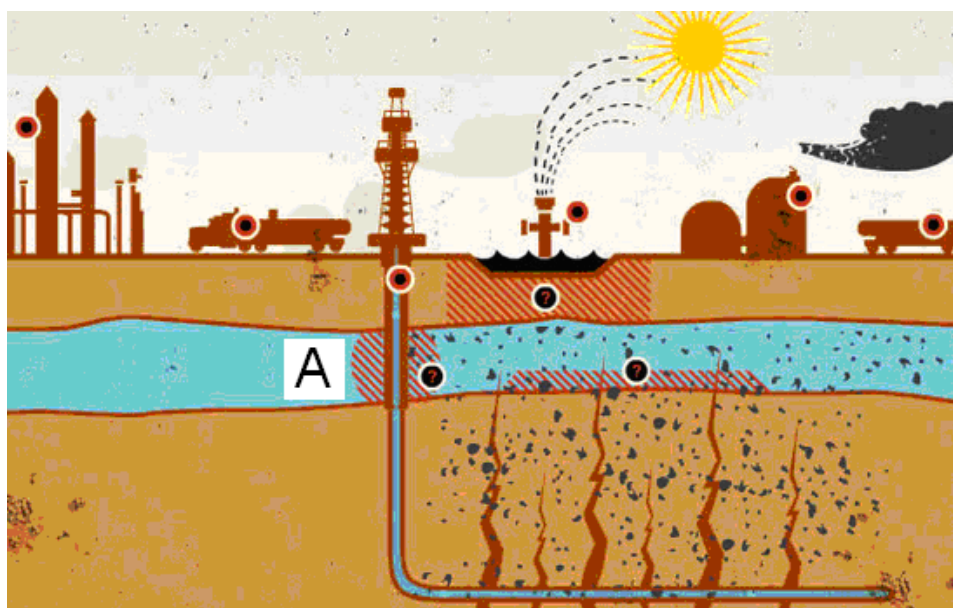
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### Introduction

I am aware that exploration wells have been dug throughout Victoria over many years to ascertain where CSG mining is commercially viable. .

As CSG mining operations (otherwise know as 'Fracking') are highly dangerous to the natural environment; to the personnel performing the work and to those living in the communities affected by these operations, I am opposed to this form of unconventional mining for the following reasons:

1. Fracking operations involve pumping **millions of litres of our precious drinking water** down each well that can never be recovered. As Victoria is prone to drought, an industry requiring such vast quantities of limited drinking water is not sustainable.
2. The various processes that Fracking use to extract the gas from the rock deep underground require a huge quantity of **highly toxic chemicals** used to 'fracture' the rock.
3. These **chemicals have to be transported along suburban and country roads** to their destination. As there are many trucks involved in transporting the chemicals and later, the toxic wastewater for disposal, the likelihood of an accident occurring that results in a **toxic-hazard emergency** occurring is very high. Cleanups do not always eliminate 100% of the spill; so the community affected is often left to endure the after effects from such accidents.
4. The **well liners are not always leak-proof**. This allows not only methane gas (that is a greenhouse gas at least 25 times more potent than CO<sub>2</sub>) to escape into the atmosphere, but it also allows other toxins to enter the aquifer (point 'A' below).



5. Reports are available where **well liners have exploded** out of the wells causing toxic fracking fluid to escape into the environment – see below.



*A fracking well operated by Carrizo Oil and Gas out of Texas in [Washington Township, Wyoming County, PA](#) malfunctioned and began spewing out dangerously chemical-laden fracking fluid at a rate that peaked at 800 gallons per minute. The spill lasted for hours and when all was said and done, about 227,000 gallons of fracking fluid had spilled.*

6. In a land as dry as Australia, **we cannot take any risk that gambles with the purity of 'our aquifer water'**, which is the lifeblood of communities (people), livestock and crops, which we all depend upon.
7. A bore hole from a frack-well can be directed to go horizontally in any direction – so that if one neighbour allows a mining company onsite to drill a well, **the horizontal section could be located underneath the next door neighbour's property and has the potential to destroy their land and environment** if any methane gas manages to leak into the neighbour's water supply.



8. The presence of mining companies involved with Fracking operations restricts the freedom of the local community to move about. High level truck operations are known to ruin local roads.



*Fracking operations going on for days, less than a week and the road , [Chenango St.](#), collapsed in crumbling sections along about a 3 mile stretch...*

9. Politicians have been accused of taking bribes to allow Fracking companies to have their way:
  - a. In [Ireland](#)
  - b. In the USA - [Pennsylvania](#)
  - c. In the UK - [Sussex](#)
  - d. In Australia – [NSW politicians](#): Independent Commission Against Corruption
10. There are no benefits for local communities from CSG mining. The only benefits are for the miners, their investors and the government.
11. There are [few if any jobs](#) for local people in the Fracking industry.
12. The health and welfare of communities affected by Fracking operations becomes severely affected.

### **Critical Evidence**

The above claims are well known, as experience in other countries (particularly the USA) that there is no benefit to any community affected by CSG mining. The following points add weight to the forgoing claims.

A summary of the comments from the articles referenced have been selected to encourage you to click on the links provided to check the facts for yourself.

### ***Fact 1: People are scared about fracking for good reason***

David Shearman [ABC – The Drum](#) | November 5, 2013

Fracking poses a risk to clean water, safe food and unpolluted air...

**Fracking represents an unhealthy battle between the community, backed by much independent medical and scientific expertise, and an alliance of governments and industry.**

This year, **the AMA adopted** a policy resolution urging governments: "... to ensure that all future proposals for coal seam gas mining are subject to rigorous and independent health risk assessments, which take into account the potential for exposure to pollutants through air and groundwater and any likely associated health risks.



**The AMA added:** “In circumstances where there is insufficient evidence to ensure safety, the precautionary principle should apply. **Applying the precautionary principle means that unless an activity is proven to be safe, it should be avoided...**

### ***Fact 2: Groundbreaking Report Calculates Damage Done by Fracking***

[Environment America](#) | October 3, 2013

As US federal policy makers decide on rules for [fracking](#) on [public lands](#), a new report calculates the toll of this dirty drilling on our environment, including 280 billion gallons of toxic [wastewater](#) generated by fracking in 2012—enough to flood all of Washington, DC, in a 22-foot deep toxic lagoon. The [Environment America](#) Research & Policy Center [report](#), *Fracking by the Numbers*, is the first to measure the damaging footprint of fracking to date.

**“The numbers don’t lie—fracking has taken a dirty and destructive toll on our environment,”** said John Rumpler, senior attorney for Environment America. **“If this dirty drilling continues unchecked, these numbers will only get worse.”**

**Table ES-1. National Environmental and Public Health Impacts of Fracking**

<b>Fracking Wells since 2005</b>	82,000
<b>Toxic Wastewater Produced in 2012 (billion gallons)</b>	280
<b>Water Used since 2005 (billion gallons)</b>	250
<b>Chemicals Used since 2005 (billion gallons)</b>	2
<b>Air Pollution in One Year (tons)</b>	450,000
<b>Global Warming Pollution since 2005 (million metric tons CO<sub>2</sub>-equivalent)</b>	100
<b>Land Directly Damaged since 2005 (acres)</b>	360,000

The image below represents the patterns of multiple fracking holes drilled from single bore holes at a location in [North Dakota USA](#). Note that the drill holes pass under the river which can make it bubble methane gas – a highly toxic gas that is also a significant greenhouse gas.



### ***Fact 3: Fracking & Injection Wells cause earthquakes***

[By Kevin Simpson, The Denver Post](#)

...A few miles away in the city, Gail Jackson joined neighbors spilling out into the street, wondering if a plane crash had triggered the big bang and sudden vibration that dissipated as quickly as it arrived. All over, phones rang and neighbors compared notes as the mystery

unraveled: Weld County had felt the tremors of a magnitude-3.2 earthquake — jarring but accompanied by little, if any, damage.

In an area peppered with wells pulling energy resources from below ground — and **many pumping wastewater from the process back into it through injection wells** — an old question resurfaced: **Could the same geological tinkering that has revved a formidable economic engine also trigger potentially damaging earthquakes?**

#### ***Fact 4: Bubbling river blamed on gas***

David Wroe, [Sydney Morning Herald](#). February 27, 2013

Video has emerged of a **major gas leak on the Condamine River in Queensland** that conservationists say could be dangerous methane leakage from a nearby coal seam gas project.



#### **Water bubble appear on the Condomine River Qld**

Anti-CSG campaigner Drew Hutton, who helped to shoot [the video](#) on the river west of Brisbane, said there were several stretches of river where furious bubbling was happening, each stretch about 30 to 40 metres long. The leak site is close to a CSG project from energy giant Origin.

Mr Hutton said the gas could explode if it reached a certain concentration. "There are hundreds and hundreds of bubbles coming to the surface," he said. "**Our gas metres shows that it's methane. It's dangerous.**" Of Origin, he said: "They know about it. They've been out there. This has been happening for weeks and weeks. I'm not ruling out that it could be naturally caused but he chances are pretty minimal. It's over too long a stretch of the river and there's too much of it."

He called on Origin to release all the data it had on the area. **CSG projects reduce the groundwater, which can cause gas to "migrate" underground and emerge in other places.**

**"When you draw down the water, you open up the possibility for pathways to be established,"**

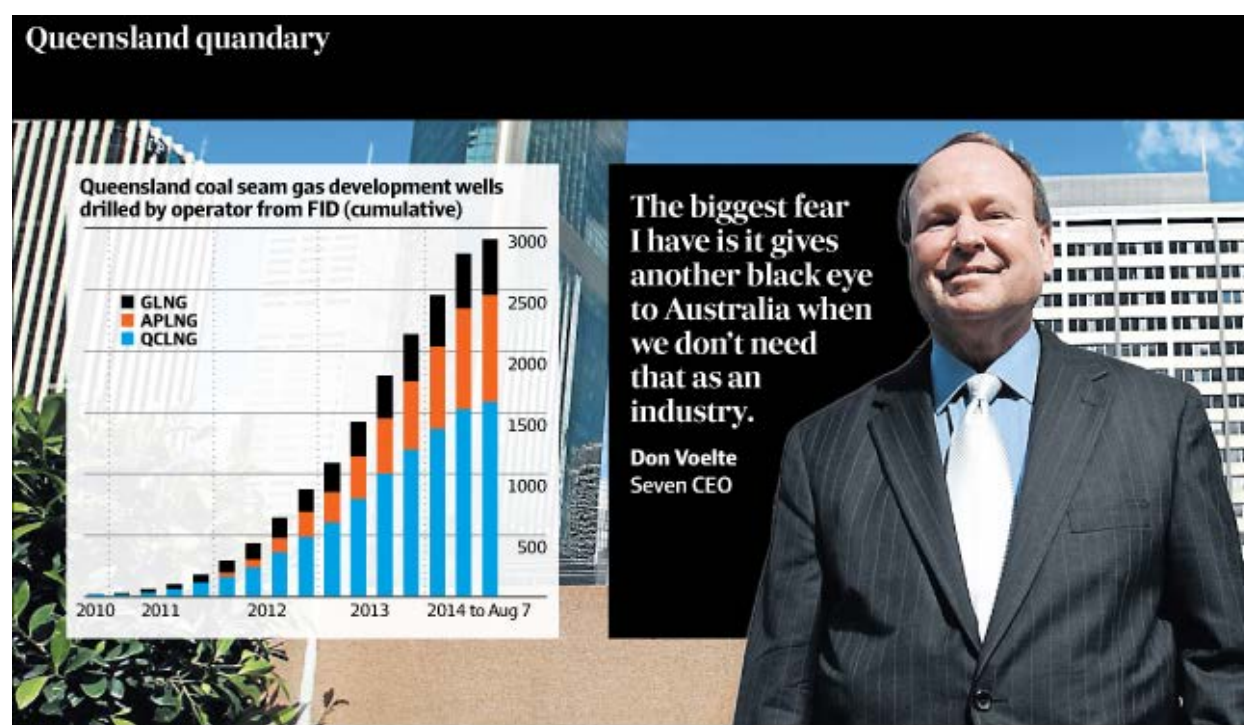
### ***Fact 5: CSG Mining not profitable – a “black eye industry”***

James Chessell [Financial Review](#) 11 Sep 2014

#### **Queensland LNG doesn't add up, says ex-Woodside boss Don Voelte**

Seven Group Holdings chief executive Don Voelte has raised fresh questions about the viability of \$70 billion worth of gas export plants in Gladstone, warning the economics of the industry had become tougher and coal seam gas remained difficult to extract – he described the investment of BG Group's Queensland Curtis, Santos's GLNG and Origin Energy's APLNG as “a big bet” in a process “with no pilot and no test”.

“It's OK to have one or two of the those problems,” he said. **“The biggest fear I have is it gives another black eye to Australia when we don't need that as an industry.”**



### ***Fact 6: Senator Glenn Lazarus reveals the truth about CSG mining in Queensland***

“I am deeply concerned about rural and regional Queensland, Senator Lazarus said... “Because relatively little is known about the broader long term impact of CSG mining on water, locals are extremely concerned that commercial mining interests and profits are being put ahead of Australia's water resources.

“Based on what farmers are telling me, it appears land owners have no rights on whether or not there will be mining activity on their land. “What Australians don't understand is that CSG mining can be undertaken virtually anywhere. It is no longer just something that happens in remote parts of Australia. **CSG mining can happen in Brisbane. No one is safe and no one has any right to refuse mining activity on their land.** This is wrong and this must be changed – urgently.”

Glenn started [a petition](#) to Prime Minister Abbott requesting him to establish “...a Royal Commission into the HUMAN impact of CSG mining” that has received more than 56,000 signatures of support to date.



**Coal Seam Gas Mining and FRACKING**

I am a strong supporter of mining and the opportunities it brings to Australia and our people. In short, mining is important for our economy. What I am concerned about however is whether it is good for our community. Over the last few weeks I have been inundated with calls, letters and emails from farmers, growers and graziers who are being impacted by Coal Seam Gas (CSG) mining either on their land or in their local area. I also met with the team from the Great Artesian Basin Protection Group. Many Australians are deeply concerned about the impact of CSG mining and in particular fracking and the risks and issues associated.

I am being told stories about farmers who have lost access to clean water on their property because of the impacts of CSG mining on the water table. I am in the process of organising a visit around Queensland to experience first hand the impact of CSG mining on Queenslanders and to talk with Queenslanders about their concerns.

I am also very distressed to hear that the Newman Government has introduced legislation in Queensland which will further reduce the rights of Queenslanders affected by mining. Quite frankly, any attempt to reduce the rights of hardworking Australians is UNAustralian. CSG is a fast growing industry and it is important that we understand and appropriately manage the risks. We can not allow Australians or our precious resources to be harmed at the hands of unrestrained mining activity.




Left to right: Senator Glenn Lazarus, Saffron Zomer, Australian Conservation Foundation and the team from the Great Artesian Basin Protection Group - Pam Goldsmith and Anne Kennedy

**www.senatorlazarus.com**



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-  [Youtube.com/PalmerUnited](https://www.youtube.com/PalmerUnited)

### ***Fact 7: Fracked off - natural gas victims flee Colorado's toxic air***

Paul Thacker / [The Ecologist](#)

Natural gas is widely touted as a 'green fuel'. But as Paul Thacker found in Colorado, fracking's national 'ground zero', it's anything but. Lives and health are being ruined by pollution from taxpayer-subsidized gas wells, flaring and refining plants, while property values collapse. **Now a mass of environmental refugees are fleeing the ravaged state.**

A general contractor in Colorado's Grand Valley, Duke Cox says the first time he became aware that drilling for gas might be a problem was back in the early 2000s when he happened to attend a local public hearing on oil and gas development. A woman who came to testify began sobbing as she talked about **the gas rigs that were making the air around her home impossible to breathe.** "There were 17 rigs in the area, at that time", Cox says. "And they were across the valley, so I wasn't affected. But she was my neighbor."

### ***Fact 8: New study shows gas workers could be exposed to dangerous levels of benzene***

Susan Phillips / [State Impact](#) August 28, 2014

A new study out this month reveals unconventional **oil and natural gas workers could be exposed to dangerous levels of benzene, putting them at a higher risk for blood cancers like leukemia.** Benzene is a known carcinogen that is present in fracking flowback water. It's also found in gasoline, cigarette smoke and in chemical manufacturing. As a known carcinogen, benzene exposures in the workplace are limited by federal regulations under OSHA. **But some oil and gas production activities are exempt from those standards.** A summary of the peer-reviewed article was [published online this month on a CDC website](#). In several cases benzene exposures were found to be above safe levels.

A spokeswoman for NIOSH says none of their studies draw any conclusions about exposures to nearby residents, but focus specifically on workers. **But Dr. Goldstein says it shows that there could be potential risks to residents as well.**

### ***Fact 9: Pa. faults Chevron for lack of oversight, poor communication in fatal well fire***

Katie Colaneri / [State Impact](#) August 6, 2014

In a new report out today, the Department of Environmental Protection says **Chevron was “too guarded” in its communication with state regulators and the media, and did not provide adequate information after a fatal well fire in southwest Pennsylvania.** The DEP admits it is also to blame for the poor communication and that the agency did not immediately assert its authority following the incident in February.

DEP investigators found the explosion was likely caused by an inexperienced contractor – known as a “greenhat” – who was sent to assist a more experienced worker in preparing to put the three wells on the pad into production. The agency determined the unnamed greenhat did not properly tighten a bolt and locknut assembly on one of the wellheads, **allowing gas to escape and eventually ignite.** “Our investigation revealed that the oversight of that operation was somewhat less than it should have been,” said DEP spokesman John Poister. A contract worker, 27-year-old Ian McKee, was killed in the fire on Feb. 11.

DEP staff were “excluded from discussions” with Chevron and Wild Well Control – the specially-trained group called in from Texas to fight the fire – “while they developed the information provided at the regularly scheduled briefing.” The report found members of the press were also not properly informed. The company set up an information center at the Bobtown Polish Club, a small bar and event hall just over a mile from the well pad. However, Chevron personnel staffing the center were not authorized to speak to reporters. Media communications were handled by DEP officials and local lawmakers who were not receiving detailed reports from Chevron.

### ***Fact 10: Shale drillers’ landfill records don’t match those of Pennsylvania DEP***

Anya Litvak and Maxwell Radwin / [Pittsburgh Post-Gazette](#) August 31, 2014

**Documents tell different story on drilling waste.**

**Data submitted by oil and gas operators on the amount of drilling cuttings and fracking fluid sent to Pittsburgh-area landfills don’t match up to reporting required of landfills.** The DEP has opened an investigation into drillers’ **under-reporting of the landfill waste.**

Six facilities in this part of the state reported receiving nearly 95,000 tons of drill cuttings and fracking fluid from the Downtown-based oil and gas operator last year. The landfills’ records are the correct ones, said Mike Forbeck, waste management director with the DEP. He said the agency has opened an investigation into drillers’ under-reporting of landfill waste.

The EQT case — **21 tons vs. 95,000 tons** — may be the most dramatic example of how data submitted by oil and gas operators don’t match up to reporting required of landfills. The DEP said it has been aware of the problem for “a number of months” and is looking into why the different reporting channels aren’t yielding the same results.

### ***Fact 11: “Utah grapples with toxic water from oil and gas industry”***

Brian Maffly / [The Salt Lake Tribune](#) August 24, 2014

**Grand County evaporation ponds avoided air quality regulation for years, documents show.**

A massive stream of wastewater tainted with hydrocarbons has been flowing into Utah from oil and gas mining on Colorado’s West Slope. **Evaporation ponds used to process the contaminated water in Grand County have released tons of toxic chemicals into the air since April 2008.**



But the Colorado company running the 14-pond facility operated without a Utah air-quality permit for more than six years, public documents show, while providing officials faulty data that underreported its emissions and exaggerated the efficiency of its emission-control equipment.

**But a later, more reliable analysis indicated the company's emissions were not negligible, but were instead tens and possibly hundreds of tons a year** — revealing the site was a major emission source for hazardous air pollutants and volatile organic compounds.

**"They were out of compliance for many years,** but they hung on debating with DAQ over how to estimate emissions. It was clear they were never a de minimis source, ever," said Chris Baird, a former member of the Grand County Council and Planning Commission who is now executive director of the Canyonlands Watershed Council.

***Fact 12: More than 250 Medical organisations, doctors, health professionals and scientists say Fracking isn't safe.***

TODAY [29 May 2014], Sandra and other members of [Concerned Health Professionals of New York](#) are joined by 25 health and medical organizations and over 200 individual health professionals and scientists in saying to New York Governor Cuomo and Acting Health Commissioner Zucker:

“We, the undersigned physicians, nurses, researchers and public health professionals, write to update you on the alarming trends in the data regarding the health and community impacts of drilling and fracking for natural gas. The totality of the science... shows that permitting fracking in New York would pose significant threats to the air, water, health and safety of New Yorkers.”



**Fact 13: Company fined for dumping CSG fracking water from AGL site in Newcastle sewer.**

19 Dec 2014, [ABC News Australia](#)

There are renewed concerns over a coal seam gas fracking operation in the Hunter Valley, after a contractor was fined for dumping wastewater into Newcastle's sewer system.

Comment: This article demonstrates that gas companies involved in CSG mining operations are acting in a criminal manner in which to dispose of their 'produced water' – which is not only toxic from the chemical it contains, but from the radioactive material that the process extracts from seep underground.

**Fact 14: The Radioactive Truth About CSG - Part 1.5.**

3 Mar 2014, [Brian Monk](#) YouTube Channel

I strongly encourage each member of the committee to view this 8-minute video that clearly demonstrates the criminal actions of the CSG mining industry in the disposal of their wastewater onto public roads.

The Geiger counter reading in the image below indicates the radiation level detected from the wastewater dumped upon a Queensland public road reached 1.03  $\mu$ Sieverts – which is a highly dangerous level of radioactivity for anyone to be exposed to.

This means that the hot bitumen road would cause the produced water to convert to steam. As vehicles passed over the area, the occupants would most likely ingest the radioactive material into their lungs and some months later contract lung cancer.

It also means that when rain fell on the contaminated area, the runoff would end up in pasture land for animals to consume or in rivers and streams.

This and other elated videos of Brian Monks' demonstrate clearly the criminal nature of those operating the CSG mining industry.

<https://www.youtube.com/watch?v=FdA3cy-7VuY>



**Fact 15: WILDLIFE REFUGES: Floods expose weakness in FWS's oil and gas oversight**

Friday, June 12, 2015, [Corbin Hiar](#), E&E reporter



HAGERMAN NATIONAL WILDLIFE REFUGE, Texas -- Swollen by a month of record rainfall, Lake Texoma inundated dozens of jackpumps, pipelines and other oil and gas infrastructure near the Oklahoma border.

Refuge officials who checked production sites on a boat tour late last month found trouble at the Blackwell Oil Production well pads in the northern reaches of the refuge.

Floodwaters had almost completely enveloped an industrial tow truck and were lapping at the base of a 10-foot-tall tank used to separate oil and natural gas from water and other materials produced by pumping wells. A gassy stench filled the warm afternoon air.

"That's not good for anything," FWS oil and gas specialist Mary Maddux said, squinting at the bubbling, oily water." The mess was a reminder of the danger that oil and gas activities pose to habitat and wildlife that refuges like Hagerman were established to protect.

**Fact 16: Expert: More research needed on fracking's impact**

June 14, 2015, [ANDREA GUNN](#),

The [Canadian] federal government needs to put its money where its mouth is when it comes to high-volume hydraulic fracturing, says one expert.

John Cherry, a groundwater contamination specialist and the lead author of a 2014 Council of Canadian Academies report on fracking, told The Chronicle Herald that if Ottawa is going to encourage fracking, it needs to start funding research that will give Canadians a clearer understanding of the environmental ramifications.

Cherry said the science regarding almost every important question about the impacts of fracking is extremely limited. He will be holding a talk at the University of King's College in Halifax on Monday titled Hydraulic Fracturing: Should Nova Scotia Experiment?.



## Summary

I do hope that parliamentarians reading this submission will take the time to click on the links provided to appreciate that there are many communities around the world experiencing the negative impacts of Fracking operations on their health and general welfare.

In view of the evidence presented above, Victoria has the opportunity to not make the mistake that other communities in Australia and around the world have made by allowing Fracking operations to become a part of their community life.

Parliamentarians – **PLEASE PLACE A TOTAL BAN ON FRACKING IN VICTORIA** if you really do care about the health and welfare of the citizens you purportedly govern on behalf of.

Please don't let us see protestors taking to the streets as this Tara mother did in an attempt to have the Frackers moved out of her community.



Yours sincerely,

Marian Noga