

INQUIRY INTO COAL SEAM GAS

Name: Name suppressed

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If we allow Coal Seam Gas mining to go ahead in the Northern Rivers area, it will not only be a case of “Cry the Beloved Country”, but also a case of “Cry for the lost future” that our children and grandchildren might have had. To inherit land containing toxic water and wasteland is reprehensible. The Border Ranges are world heritage listed because of the rainforests, the clean air and clean water produced by the rainforests. The mining companies (most of whom are not Australian) will not protect or respect what we have here, and the loss to us and Australia will be catastrophic. Our biodiversity will suffer, together with the endangered animals, birds and other creatures, and the humans left here will be incubating horrible diseases caused by the poisons used and created in the process.

"Treat the earth well: it was not given to you by your parents, it was loaned to you by your children. We do not inherit the Earth from our Ancestors, we borrow it from our Children." -Ancient American Indian Proverb

This submission discusses the following consequences of allowing this CSG mining to go ahead:-

- Potentially catastrophic escalation in fire danger
- Potential for land subsidence
- Potential for increased earthquake consequences
- Poisoned land that can no longer grow food
- Irreversible contaminated, unusable water
- Release of vast quantities of Methane – potent Greenhouse gas

To allow foreign companies to desecrate such pristine beauty and wonderful fertility, for a mere pittance that will not even be to Australia's benefit, is totally irresponsible. The farmers love and care for their land, feeding the nation and leaving a continuing, sustainable legacy for future generations. What will be left after the mining companies have had their way? Dead, poisoned, worthless land and potential starvation for our Australian population. We totally oppose allowing this to happen in the Northern Rivers area.

The politicians that we voted into power are NOT mandated by us to sell our very existence. There is a total disconnect in recognising the fact that the food they purchase in the shops has to be grown somewhere. It does not originate in the shops. To grow food requires clean air, good soil and clean water. These items and coal seam gas mining are mutually exclusive. The short-sightedness of allowing this man-made destructive force in this fragile world that is being threatened by natural events must be shown up and eliminated.

Have we not learned from what Fracking has done to the American landscape? Have we not seen the disastrous results in Queensland? How can it be justified to continue allowing these practices to continue in Northern New South Wales as well? It can't and must be stopped.

“Those who cannot learn from history are doomed to repeat it.” - Spanish philosopher George Santayana

The world is already in severe trouble with the happenings in the Gulf of Mexico and at

Fukushima. That pollution and radiation will spread over the whole planet in time. Let us at least preserve our Northern Rivers area as unpolluted as we can, in order to give ourselves some chance of surviving what has been unleashed upon us already.

Pipelines crossing the Northern Rivers countryside that, in the dry season is prone to bush fires, is a ready recipe for a multi-kilometre BLEVE (Boiling Liquid, Expanding Vapour Explosion). A tanker truck loaded with 23 tons of liquid propylene experienced a fire and subsequent [BLEVE](#) (Boiling Liquid Expanding Vapor Explosion) directly in front of the *Los Alfaques* campsite in Spain and 217 people (including the driver) were killed and 200 more were severely burned. Imagine what carnage a pipeline, laden with gas going BLEVE, could cause in dry forests, and as it goes through local villages (Kyogle) along the way. Something like that could rival even what we are seeing today in Japan, with the only difference in the number killed and the “capital” damage, but the damage to world heritage listed forests would be horrendous. What would also be horrendous would be the loss of food production and food producing areas and infrastructure along the length of the pipeline.

Based on [“The sand carried in the water is deposited in the fractures to prevent them closing when pumping pressure ceases.”](#), what is the potential for future subsidence or [sinkholes](#) happening on a grand scale after all the fracking is finished? The suburb of Carltonville in South Africa is a case in point - [“houses “would tilt, crack and collapse”, and about the tragic case of the Gregory family who were swallowed up, house and all, “by a sinkhole that appeared in the night”](#)“. There had been extensive mining in that area. Pumping sand in to fill the cracks is not like having the un-fractured rock in place. Should Australia ever experience an earthquake of any reasonable magnitude, then this sand and any residual chemicals and fluids in the sand, would result in soil / sand liquefaction at the sites of the CSG extraction causing sinkholes to further exacerbate the local effects of the earthquake, and leading to major subsidence. Given that the Demon Fault line is only a short distance West of this area, and close to the Metgasco CSG field near Casino, and the areas relative proximity to the recently very active Pacific Ring of Fire and between the two most seismically active areas in Eastern Australia – [the Wide Bay area and Newcastle](#) added to the fact that a large area of the Tweed Shire surrounding Mount Warning (an extinct volcano), it is well within the bounds of possibility that this area could experience [anthropogenic seismic instability](#). The above-mentioned Arkansas issues may be the early stages of just such a situation. The potential effect of all this may be large tracts of food-producing land disappearing into sinkholes, along with people and capital – roads, bridges, railway lines, villages etc..

There can be other “unintended consequences” from the fracturing process as can be seen from the articles entitled [“Largest earthquake in 35 years hits Arkansas”](#), [“Gas companies blamed for more than 30 earthquakes in two cities in four days”](#) and [“Fracking the life out of Arkansas and beyond”](#) which is a very well referenced article.

*** Find recent article on earthquakes caused by fracking

As can be seen from [“Methane gas leaks spark concerns”](#) and [“Leaking coal seam gas concerns”](#) there have already been Methane leaks at Casino. The corporation that will profit most from the CSG extracted, states that these were “small gas leaks from the piping connections”. Since the fracturing process can cause fractures to [400m from the well](#), how can there be any surety that the now liberated Methane will NOT start bubbling out somewhere other than their well pipes? There are too many examples of people being able to ignite the water that flows from their [taps](#) or [water wells](#). There will always be the

leakage of methane through the production, transport, processing and use of coal seam gas, to add further to the already vast quantities of other pollutants that industry and mining are pouring into our environment, causing Governments to need to spend more money on the already stretched health system to correct and combat the effects of these pollutants.

History has ably demonstrated that these profit-driven corporations have no intention of letting disaster happen, but by the same token, they have proven every time, that they were not prepared adequately either. This lack of adequate planning, forethought and strict adherence to any form of Precautionary Principle has consistently produced situations where if something went wrong, it went BADLY wrong. This left huge cost in life and the diseases that inevitably follow the release of toxins into the local environment and population - "[Bhopal Union Carbide](#), 1984", "[Exxon Valdez](#) oil spill, 1989, "[Chernobyl](#), 1986", "BP Gulf of Mexico, 2010" and "Fukushima Nuclear plant, 2011". None of these statistics takes into account the residual pollution that is left in the environment (heavy metals, Corexit, radiation, etc.) which is eventually taken up into the food chain, only to produce more diseases and deaths. All these, and no doubt, many others have demonstrated that corporate greed knows no bounds, and that in their concentration on declaring a profit at the next quarterly reporting season constantly put profit before people.

Based on the following articles entitled "[Not enough nutritious food in Australia](#)" and "[Doubts about Australia's ability to feed itself](#)", and the recent spate of natural disasters (floods and cyclones), Australia needs all the food producing land possible. We do not need to have these mining corporations reducing our available food producing land, for exorbitant profits that will be repatriated out of Australia.

With the "[Global food chain stretched to the limit](#)", "[Wheat disease a threat to global food security](#)" and "[World Bank: Food prices at 'dangerous levels'](#)", the entire world needs all the food it can produce, and cannot afford any further reduction in land that has the potential to produce food.

The argument that the product of the Coal Seam Gas mining should not be subject to the Carbon tax is fallacious, as methane is far more of a problem to Climate Change than carbon dioxide is.

["Coal seam gas \(CSG\) is methane gas stored within coal seams."](#)

Methane has a molecular lifespan of twelve years according to the table in the section entitled "What Are Greenhouse Gas Emissions?" in the article [Global Warming Potential](#).

[The Global Warming Potential \(GWP\) of Methane](#) states that Methane has a GWP value of 72 (62) times that of Carbon Dioxide over a twenty year time frame. Since the total lifespan of the Methane molecule (before it breaks down) is only twelve years, the true value is should be considerably higher.

As can be seen from Figure 3 in the paper entitled "[GLOBAL WARMING : THE SIGNIFICANCE OF METHANE](#)" by Benjamin DESSUS, Bernard LAPONCHE, Hervé LE TREUT (February 19, 2008), the real GWP value for Methane over the twelve year lifespan of the molecule could be computed / extrapolated from the table at about 86 times that of Carbon Dioxide.

After the twelve year lifespan of the Methane molecule, Methane breaks down into water

vapour and Carbon Dioxide. Since the Methane molecule (CH_4 – C atomic weight = 12, H atomic weight = $1 \times 4 = 4$, therefore the molecular weight = 16) is lighter than dry air at sea level ([molecular weight approx = 29](#)), the Methane has had twelve years to ascend the atmospheric column. Once the break down to Carbon Dioxide occurs, this Carbon Dioxide is now very high up in the atmospheric column, at approximately the level where the CO_2 can do the most harm to the climate below (as per IPCC).

Based on the statement by Katrina Hodgkinson, the new Minister for Primary Industries and Water - "[Food production and security is at the top of my list. Listen to speeches I've made in parliament, rather than laws and regulations](#)", we trust that she will be true to her word. Food security for Australia, is diminishing with every acre destroyed by any cause, with mining being one of the worst culprits. We hereby challenge the new O'Farrell government and Minister Hodgkinson to be true to her words and demonstrate that the people of NSW still have a democratic government "of the people, by the people and for the people", and NOT "of the people, by the elite, for their corporate employers or masters". It is now up to you, the new government of New South Wales to PROVE that you can and WILL put 'We The People' (your constituents who voted you into your current positions) before corporate profits.

"The nation that destroys its soil destroys itself" (Roosevelt 1937)