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INQUIRY INTO COAL SEAM GAS

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SUBMISSION

TO

The NSW Upper House Inquiry into Coal Seam Gas Mining.

Compiled by
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Submission to the NSW Upper House Inquiry into Coal Seam Gas Mining.

Introduction.

The Clarence Environment Centre has maintained a shop-front in Grafton for over 22 years, and has a proud history of environmental advocacy. We have been particularly concerned about the activities of coal seam gas miners in our district, and have already sponsored an information seminar for concerned landowners, made representations to the Clarence Valley Council and, by invitation, spoken at landholder gatherings.

The screening of the American documentary, "Gasland", was a wake-up call to the world, and the predictable response from the gas mining industry, claiming that what they were doing here in Australia is not the same, failed to convince many in the community.

It now seems the community's skepticism was well-founded, with evidence emerging from Queensland to show that what the gas industry is doing in that State is exactly what they were doing in the USA, with water bores being set alight, carcinogens being found in water supplies, exploding well heads, and releasing toxic produced water into waterways.

The claims by the industry that it is highly regulated is a complete nonsense, and Governments across Australia must take responsibility for firstly failing to put adequate controls in place, and secondly failing to monitor compliance with those controls that were in place.

Justification

Coal seam gas (CSG) is a fossil fuel and its use contributes to greenhouse gas pollution. It generates more than 40 times the amount of greenhouse gas per unit of energy generated than solar or wind and will make a major contribution to global warming.

The big lie being promoted by the CSG industry, is that gas is an ideal. Low emissions, transitory fuel for electricity production as Australia moves to a renewable energy future. The lie becomes clear when all the collateral carbon emissions are taken into consideration, something that has now been quantified by scientists from the Cornell University in the USA. They have found that when all the emissions, including methane vented or flared directly into the atmosphere, along with emissions from machinery used in land clearing, and the manufacture and laying of pipelines, in drilling and fracking processes, as well as the pumping, refining and liquefaction processes, and transport, the total footprint of CSG exceeded even that of coal-fired electricity production.

The fact that most gas in NSW is extracted for export, not to meet local energy needs, further confirms the transition fuel lie. Therefore there is no justification for mining CSG at this time.

Summary.

Faced with global warming, it is imperative to move to renewable energy. There are vast solar, solar thermal, geothermal, and wind resources in areas where CSG mining is now proposed, The massive expansion of coal seam gas production is delaying the transition to renewable energy alternatives, while adding to atmospheric pollution, so it is equally imperative the gas mining be discouraged.

The Clarence Environment Centre calls on the Government to place a halt, not only on coal seam gas exploration, as appears to be the case at the moment, but a halt to all gas mining activities until:

1. All gas mining activity is subjected to all relevant environmental legislation, including the Native Vegetation Act, the Environmental Planning and Assessment Act, and any water management regulations.

2. All potential environmental and social impacts are thoroughly and independently assessed, and guarantees given that:

- Groundwater will not be contaminated,
- aquifers are not damaged,
- gas wells will not leak methane into the atmosphere thus contributing to climate change,
- toxic chemicals will not be placed underground, and
- polluted produced water will not be released into waterways.

3. The provision of standing to ensure that the community has full legal rights to challenge and enforce environmental laws under which coal seam gas companies are operating.
4. The provision of a right in the Petroleum (Onshore) Act to allow landholders to refuse consent for coal seam gas exploration or production on their land.
5. The exclusion of coal seam gas exploration and mining in high conservation value bushland, and forests, and State Conservation Reserves.
6. The exclusion of coal seam gas exploration and mining on prime agricultural land and in residential areas.
7. The total exclusion of all mining in urban water supply catchments.
8. The granting of an exploration licence, which requires minimal ecological assessment, automatically provides miners with an expectation that they will be allowed to exploit whatever minerals they find. Therefore Government needs to immediately map all areas where CSG will be excluded.

Environmental Impacts of Coal Seam Gas Mining (CSG)

There is ample evidence that CSG mining represents a serious threat to water resources, including:

* The potential for drawdown and contamination of groundwater aquifers, including potential for major cumulative impacts on the Great Artesian Basin and a multitude of urban water supply catchments in coastal NSW.
* The pollution of surface water systems from 'waste' water, leading to serious reductions in water quality.
* The use of large volumes of water for drilling and fracking in water systems that are already over-allocated, such as the Murray-Darling Basin.
* The location of CSG wells on sensitive floodplains and in water catchments.

Examples include the discharge of treated 'waste' water by Eastern Star Gas into a creek in the Pilliga; the 'unavoidable' release of stored toxic produced water during the Queensland floods; the location of CSG wells on the floodplain at Casino; exploratory drilling near Woronora Dam in water catchment areas of Sydney and the Illawarra; drilling near the Tomago sandbeds water catchment area in the Hunter.

CSG mining produces vast quantities of waste that represent a serious environmental risk, the management of which is highly problematical and leads to environmental degradation where storage, leakage, spillage and discharge occurs.

Also, evaporation treatment of waste water results in a highly concentrated 'brine' by-product, that is extremely difficult to dispose of without causing harm. Already in Australia there has been spillage

of waste water leading to extensive tree death in the Pilliga; deliberate discharge of saline water leading to a pollution event near Broke; and native animal deaths at drill ponds in the Pilliga.

CSG mining represents a major threat to natural areas, with extensive clearing and fragmentation of native bushland and threatened species habitat, transforming major vegetation remnants, refuges and corridors into industrial zones. Likewise it poses a major threat to wetland systems, even distant ones that are hydrologically connected.

Even protected areas and public lands are not safe from CSG mining which can occur inside dedicated State Conservation Areas, and in close proximity to National Parks where drilling of horizontal bore holes can intrude hundreds of metres under the parks themselves.

In the Pilliga, CSG mining will clear at least 2,400 hectares of bushland and fragment 85,000 hectares of public lands, including State Forests and State Conservation Areas. At Putty drilling is planned next to the World Heritage-listed Wollemi NP; at Poggy, drilling is occurring on an inholding in Goulburn River NP; in north-west NSW.

Travelling Stock Routes, which often constitute the only remaining vegetated corridors for wildlife, are targeted for drilling and gas pipeline infrastructure; in the north-east, a pipeline is proposed through the World Heritage-listed Border Ranges NP.

CSG mining represents a serious risk to human health due to poor management of chemicals and use of toxic subseances without full disclosure, particularly during fracking and drilling. There is also the potential for contamination of water used for human consumption and irrigation of food crops, while leakage of methane and other toxic gases during gas production, and the underground 'migration' of methane into water supplies, also poses threats to human health.

The recent foamy discharge from a well at Camden, methane leaking from gas pipelines and a water drain in the Pilliga, and leaking well-heads at Casino, are all examples of the inability of gas miners to control their infrastructure.

The regulatory processes, including assessment, approval and compliance, are all drastically inadequate, as is evidenced by the approval of the Gloucester AGL project without any details about what it entailed, and the lack of resources or political will to enforce compliance in the Pilliga.

Social Impacts of Coal Seam Gas Mining

CSG mining causes major social impacts. Landholders face the prospect of losing control of their land, and property values are degraded with options for re-sale lost once exploration licences are issued.

The social fabric of communities is drastically weakened, with evidence that communities dominated by fly-in/fly-out workers show higher incidence of violence and crime, soaring rents and worsened mental health outcomes.

With widespread opposition to CSG, gas mining companies naturally target more compliant or absentee landowners within the community, and this leads to considerable friction between neighbours, leading to a fractured community.

Economic Impacts of Coal Seam Gas Mining

The rapid expansion the CSG industry will have major economic impacts. Food security is threatened by risks to groundwater and loss of arable land. This in turn will have detrimental

impacts that undermine economic diversity and will lead to a skills shortage in other rural industries, such as organic farming, tourism, vineyards and orchards, and can lead to collapse of businesses unable to compete for staff.

Councils are currently largely excluded from the planning process and are concerned that rural roads and other infrastructure will suffer as a result of the heavy machinery usage, and huge amounts of water that needs to be transported to each wellhead. Certainly, the mining companies are unlikely to contribute.

Royalties paid to the State create an expectation that projects will be approved, whilst failing to deliver sufficient funds to offset the impact of CSG mining and burning.

The Clarence Environment Centre thanks you for the opportunity to comment, and urges the NSW Government to put the brakes on CSG mining.

Yours sincerely
John Edwards
Honorary Secretary.