Submission No 654

# INQUIRY INTO COAL SEAM GAS

Name:

Date received:

Ms Catherine Smit & Mr Peter Robinson 7/09/2011 The Director General Purpose Standing Committee No 5 Parliament House Macquarie Street SYDNEY NSW 2000

7th of September, 2011

Submission to the Upper House Inquiry into Coal Seam Gas in New South Wales

#### Dear Sir/Madam,

Thank you for the opportunity to raise our concerns about the proposed expansion of the Coal Seam Gas (CSG) industry in NSW. While we are very concerned that approximately 25% of NSW is currently covered by CSG exploration licences and that this includes major metropolitan areas, cities and towns, the focus of this submission will predominately be on the impacts of the proposed CSG mining project in the Pilliga Forest, near the towns of Narrabri, Coonabarabran, Baradine, Boggabri and Gunnedah. This proposed project covers an area of approximately 85,000 hectares and, if it goes ahead, which we strenuously oppose, would be the largest CSG project in NSW.

#### 1. The Environmental and Health Impacts of CSG Activities

#### WATER

Our communities are particularly concerned about the potential for the contamination of water, both surface and ground water. Communities in the bush rely upon good quality ground water - we cannot live here without it, let alone produce food. The extent of the risk of drilling through the aquifers, both the Great Artesian Basin and the local aquifers, is not known at this stage. As this is such a precious and essential resource, we would urge a precautionary position of zero tolerance of risk. Furthermore, large volumes of water are required in the CSG industry and the Murray Darling Basin is already over allocated. We simply cannot accommodate another water hungry industry and it is unfair to ask farmers to reduce their water consumption, whilst giving the green light to the CSG industry.

We are also concerned about contamination of ground water, with the discharge of "treated" water into local creeks. Mining companies operating in the area do not have a good environmental track record. In fact Eastern Star Gas' operations in terms of it's "pilot" wells in the Pilliga Forest, some of which are in fact potentially illegal production wells, are currently under investigation for possible breaches of the federal EPBC Act. We have also seen the recent report by various conservation groups entitled "Under the Radar" about the negative impacts on the Pilliga Forest that have already occurred over the last decade, including saline and other chemical contamination of soil and water and extensive tree and native animal deaths. This substantially undermines the communities' confidence that the companies concerned could carry out the proposed expansion of their activities in any acceptable way. The industry should be subject to all environmental legislation, particularly the Native Vegetation Act 2003 (which local farmers have to comply with) and the Water Management Act 2000. Resources need to be allocated for constant monitoring, feedback to communities and to enforce compliance. We are also supporting the call for a provision

of standing to ensure that our community has full legal rights to challenge and enforce any environmental laws under which coal seam gas companies are operating.

## HEALTH

We are concerned that CSG mining represents a serious risk to human health. Clean air, clean water and uncontaminated food are basic human rights and governments at all levels have a duty of care to citizens to ensure these rights are not violated. The risk that water used for human consumption and agricultural production could be contaminated by the chemicals used in drilling or fracking as well as being contaminated by the carcinogenic compounds naturally occurring in the coal seam, is one that we do not find acceptable. Similarly, air quality is jeopardized by leakage of toxic methane and other gases during gas production. These chemically laden gases potentially condense and become attached to water molecules in the process of the formation of fog, dew, and rain, allowing the contaminants to then settle on farmlands, stock and people. The detailed submission by Doctors for the Environment Australia to the Federal Parliamentary Inquiry into CSG impacts on the Murray Darling Basin covered an alarming range of health concerns. At the very least, if CSG mining is allowed to go ahead in a very controlled and limited way, we would like to see a requirement that all chemicals used in CSG drilling or fracking are assessed by the chemical regulator for use for that purpose before being approved for use.

## FIRE RISK

People in the surrounding communities, farms and isolated dwellings are very aware of the devastating effects of wildfire and find it very concerning that the presence of highly combustible methane gas (often leaking from or "flared" from the wells) and increased opportunities for ignition from machinery and human activity, in conjunction with the natural risks of ignition from lightening strikes, seems to logically pose a major increased risk of catastrophic fires. Nobody knows what will happen if a lightening strike hits a steel well head, in the presence of leaking methane gas. We find it unacceptable that local firefighters, volunteer and professional, who are valued members of our community, would be called upon in the inevitable increased major fire events triggered by this inappropriate development.

## INTRINSIC VALUE OF THE PILLIGA FOREST

The Pilliga is also the largest remaining temperate woodland left in Eastern Australia, a known National Biodiversity Hotspot and important Aboriginal Heritage area. As such it is high conservation value bushland that needs to be protected for the long term benefit of all Australians. CSG mining activities involve extensive clearing and fragmentation of native bushland and threatened species habitat. Most farmers understand the flow on values of the Pilliga in terms of rainfall generation, aquifer recharging and biodiversity in sustainably managing their farms. For all these reasons, we believe that the Pilliga is a community asset that the following generations deserve to inherit undamaged and one that mining companies, shareholders and governments do not have the right to exploit, with potentially irreversible consequences, for short term profits and revenue raising.

2. The Economic and Social Implications of CSG activities

## SOCIAL IMPACTS

We are concerned about the use of fly-in fly-out (FIFO) workforces in CSG projects. We understand that there are new studies which have shown that this type of workforce arrangement actually has negative outcomes for the surrounding communities. The evidence that communities dominated by FIFO workers show higher incidence of violence and crime, soaring rents and worsened mental health outcomes is worrying. These effects would be worse for the most vulnerable and disadvantaged members of our communities.

We are also concerned about the potential of these developments to divide our communities. This could occur with individual landholders being able to grant access for CSG mining without reference to neighbors' and/or community wishes. We are also strongly supporting the call for the introduction of a provision in the Petroleum (Onshore) Act to allow landholders to refuse consent for coal seam gas exploration or production on their land.

Another major concern for our region relates to the potential negative effects on the tourism industry. Tourism in the Warrumbungle Shire relies upon the surrounding National Parks, State Conservation Areas, NPWS Reserves, Travelling Stock Reserves and State Forests being left intact. Tourists (and locals) do not want to see industrial landscapes with the associated infrastructure. Tourism also includes the sale of local produce from olive groves, vineyards, apiarists, organic orchards and market gardens etc, which we would not like to see jeopardized.

The Australian Astronomical Observatory (AAO) at Siding Springs is also a tourist drawcard. The operations of the AAO rely upon limiting the light and dust pollution in the surrounding regions. Major CSG developments in the region could impact upon the operations of the AAO. And, of course, the continued unimpeded operation of the AAO is scientifically important to the wider Australian and, indeed, the World community, in its' own right.

We also do not think it is fair that the local community would be asked to foot the bill for the wear and tear by the activities of the CSG industries on local infrastructure, for example, roads. This is especially so since we understand that royalties will not be paid for the first 5 years, by which time the average well will have ceased production. We can see little benefits for the average tax payer and many, potentially devastating and irreversible, prices to pay.

## 3. The role of CSG in Meeting the Future Energy Needs of NSW

## **GREENHOUSE GAS EMISSIONS**

We believe that the claims that CSG is a clean, low emission technology and is an important transitional energy source for NSW are unsubstantiated. CSG is a fossil fuel and a significant source of greenhouse gas pollution. It generates more than 40 times the amount of greenhouse gas per unit of energy generated than solar or wind. Coal seam gas will make a major contribution to global warming, particularly when fugitive emissions and liquefaction prior to export are fully considered, given that methane is up to 20 times

more potent as a greenhouse gas than CO2. Furthermore, it appears there are actually no plans to convert existing coal fired power stations to gas and that 90% of the gas is actually going to be exported. Furthermore, there is now the example of "Solar Tres", a solar thermal project in Spain, which demonstrates that 24/7 base load power generation from renewable sources is possible. Solar thermal solutions to our energy needs are especially relevant in North Western NSW with its' large proportion of sunlight hours. We need to move ahead with encouraging innovation and investment in alternative energy projects, in conjunction with reducing energy use through education, instead of relying on "more of the same" fossil fuel solutions.

For all of the reasons that we have raised above, we are joining the 74% of people in NSW who want at least a 12 month full moratorium on all stages of development of the CSG industry so that environmental, social, health and economic impacts can be rigorously and independently assessed. We do not see industry self regulation, including environmental assessments undertaken by consultants hired by the company, as being acceptable. We would also urge a total prohibition on CSG exploration and mining in important bushland, valuable farmland, groundwater aquifers, residential areas and public lands.

Thank you again for the opportunity to make a submission to this important enquiry.

Yours sincerely,

Catherine Smit and Peter Robinson