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INQUIRY INTO COAL SEAM GAS

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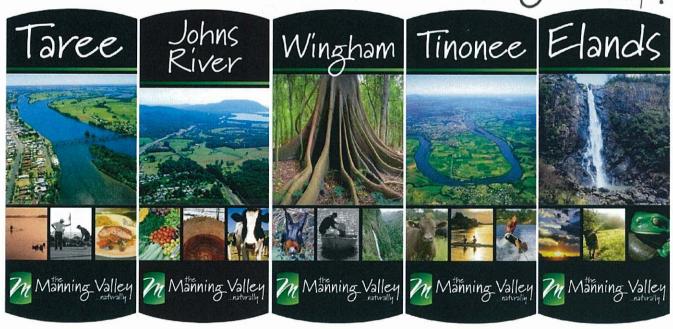


manning alliance inc.

Working Strategically with the Community to Prevent Coal Seam Gas Drilling in our Valley.

SUBMISSION

Manning Valley



NSW Legislative Council

General Purpose Standing Committee No. 5 Inquiry in to Coal Seam Gas 7 September 2011

Our Goal is to Preserve the Agrarian Amenity of the Manning Valley for Future Generations!

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1.0 Preamble

Manning Alliance Inc. wishes to submit the following submission to the General Purpose Standing Committee No 5 regarding the Inquiry into Coal Seam Gas regarding the environmental, economic and social impacts of CSG activities, including exploration and commercial extraction activities, allowable under the NSW Petroleum (Onshore) Act 1991.

2.0 Introduction from The Manning Alliance Inc

The Manning Alliance was formed as a result of a series of Public Meetings and Information Nights held in the district for Landholders, Farmers and Members of the Community. Over 300 people have attended these events and have expressed grave concerns regarding Coal Seam Gas Mining (CSGM) and the current system that is allowing the Exploration and Mining Companies to have unfair, and unreasonable status over landholders and farmers who, in many instances, have farmed and worked their land for many generations.

The comments and views expressed in this document reflect the clear and unreserved opinion of The Manning Alliance Inc., and the hundreds of community members of the Manning Valley who have attended Public Information Forums.

The CSGM is a most grave and serious issue, which has caused significant: shock, fear, anguish, concern, anger, and hopelessness, amongst ordinary and decent people who, for a greater part of their lives, have worked hard on the land, and in what can really be argued as the National Interest, providing food for our nation, and food for export (and our economy) and particularly in times of crisis when other industry sectors were uncompetitive or had failed.

It has always been the men and women on the land who have always, taken a little less, but have always been there for our Country.

Having survived droughts, floods, bushfires, government interference in the re-structure of industry segments such as the Dairy Industry, it now appears that they are under attack, yet again, and for what?

Can't we just leave these people alone to get on with the job of doing what they are good at: "continuing to contribute to our economy, our health and wellbeing!"

We live in the beautiful Manning Valley of Australia, not the United States, nor Europe, nor Asia, which are places that are either heavily or densely populated, built out, have considerable pollution issues, and or have unique circumstances which have created an ongoing and significant dependence and demands for energy.

As such we need to be vigilant: to defend and protect our living standards and our way of life. We should never risk nor compromise the basic human requirements for air, water and food under any circumstances, particularly in a world, which has a growing population, and the subject of food security and the availability of water will become critical!

We don't need to try and copy or emulate what is happening in the United States, in fact, given the condition of the United States at this time, whether it be socially, structurally, economically or in

relation to Food Quality, Water Quality, genetically modified, and other serious environmental issues, we should be extremely cautious at introducing anything from that country.

A similar situation applies to Asia and indeed, the rest of the world for that matter. As Australians, we should create and maintain our own valves and standards, we must revere, treasure and respect the wondrous, rich and natural bounty that exists in this country and protect it at all costs for future generations. Our natural and bio-diverse environment is our future, our grandchildren's future and "the Australian way of life". It's our way of life!

This is why we should not, and indeed we don't, need to jump into the mire of Coal Seam Gas Mining recklessly, and with some extreme sense of indecent urgency, as if it really is the end of the world and as if we don't take up this opportunity, it will pass us by never to return. One argument is that perhaps we should let this opportunity pass us by at this time. The fact is that the world will always need energy, and we need not, nor should we, climb into that pit voluntarily. We should hold off until it is critical and a necessity, and there is substantial balanced scientific data which demonstrates with some degree of certainty that the industry is mature, respectable and responsible.

Nor should we be bullied into accepting and adopting unqualified and potentially indiscriminate technologies that other countries are prepared to adopt in desperation to feed and meet their national energy requirement. We don't need to compromise and risk the health of our nation, the health of our environment, the health of our land and the quality of our water. Nor do we need to jeopardise the existing local economies by imposing a process which may, in fact, create a few "new" jobs, but will significantly impact upon and harm other existing and non compatible activities such as agriculture, animal farming, or tourism.

The employment argument is really not very strong, and has very limited implications. This is exemplified in the "general mining industry" where we now have what has been described as a two-speed economy, and the mining sector is robbing tradespeople from existing manufacturing and other industries. Clearly, if the demand for skilled labor becomes excessive then wages will rise, inflation will increase and our international competitiveness will fall and in a wide range of export sectors, including farming and agriculture. This results in no net significant benefit in employment, just robs Peter to pay Paul. Perhaps it might allow the government to maintain statistical appearances that new jobs are created, but it will damage the existing structure and our current and very limited manufacturing base as well as or rural and regional economies, which we have worked so hard to build.

Further, and perhaps of more significance, is the fact that CSGM negatively impacts on communities. All surrounding industries such as agriculture, farming, tourism, construction and property values are significantly reduced. There are down stream effects and implications on construction. This is all before an "environmental accident" may occur! The experiences in the United States, Canada and now Queensland clearly demonstrate this!

The evolution of the 'new' CSGM is, as a result, of America's ongoing hunger and demand for energy. It is now their most immediate and expedient solution to feed their ever-growing energy consumption beast in order to retain profits for **their** corporations, **their** financial institutions and desperately prop up and maintain some level of economic activity. The United States is seriously struggling with severe social, economic and environmental consequences.

For decades the United States has squandered enormous oil reserves and is now desperately trying to balance its energy requirements (with CSG), which have been placed under severe stress by the dependency on import of oil from the Middle East.

Conversely, at the present time Australia does not need nor require the CSG industry for its own stability, growth and economy. We have sufficient energy resources and alternatives to fuel this country and its economy for many years to come.

CSG has been touted by a number of Federal Government Ministers and Professor Ross Garnaut as the most obvious alternative to replace coal powered electricity generation. Unfortunately it appears that this conclusion has been reached without due and proper consideration of all the relevant facts and proper due diligence. Studies from Cornell University in the United States are know questioning the value of CSG over coal if measured through its full life cycle!

As more detailed study, knowledge and experience is emerging regarding the 'new' CSG industry there is significant and growing concern with all the down stream implications.

Everything comes at a price! If it looks too good to be true - then it probably is!

The 'new' CSG mining or drilling is immature and in the very early stages of its evolution. Most of the research and experience comes from the United States, where in recent times the environmental protection laws have been very 'flexible' and the research and experience has either been funded and or controlled by the major drilling interests.

For a number of years companies such as Halliburton have claimed propriety ownership of patents and have controlled information regarding the chemicals (and their composition) which are used in CSG drilling. Authorities such as the EPA and other entities have been deliberately denied access to accurate information.

It appears that some of the chemicals that are used in the United States are not identified and even the drillers who carry out the practice do not really know, nor understand, the chemicals or what the implications are either to the environment or to themselves, as individuals who handle the chemicals.

This cone of silence and secrecy from the industry in the US has clear and significant implications on the industry here in Australia, an industry that has been educated on CSG by US engineers and executives. It is still likely that our industry is severely influenced, educated and updated by the United States model.

The secrecy element must clearly ring warning bells to any reasonable and responsible government agency or official. In the Halliburton experience, the company fought off subpoenas from the EPA for some considerable time, until executives were threatened with jail time.

These types of antics only serve to fuel greater concern within the community over the BTEX chemicals used in CSG.

Currently, United States is one of a few countries with substantial CSG wells. Its corporations own and control a significant part of the knowledge and experience with CSG drilling. If their engineers specify particular products to be used in the process then the reality is that our engineers have followed, and may indeed continue to follow. The QLD Environment Minister admitted in a recent, television

interview that he didn't know which chemicals are being used in CSG drilling, but he believed that they were "safe". Such an admission is inexplicable, but the lesson to be learnt from this is if a government minister doesn't know what is going down the shaft how is a driller or the local engineer expected to know and understand, particularly if the product that they use is not labeled properly or is described as "secret".

The manner in which CSG has been allowed to evolve in Australia, practically unregulated, is of serious and significant concern to the public at large.

The public does not see the sense in it. More importantly, they cannot understand nor accept that the government can and does allow this very dangerous and hazardous process of "fraccing" to be utilised, unregulated, whilst the public have been progressively educated towards understanding environmental concerns, which face our planet. The public has been encouraged and regulated to be environmentally conscious and responsible!

We are encouraged to install and use solar powered panels on our roofs for hot water. The government has introduced Solar Power Rebate Schemes. We are encouraged to use our household water more efficiently. Water restrictions have existed in some form in all states for nearly a decade. In our cities when new houses are built, we require the owners to install water tanks and collect water from the roof. Our garbage is collected in 3 or 4 different bins and we are encouraged to recycle. Our homes must have gutters and storm water overflow solutions particularly in areas where water may end up in a creek or stream. The public is aware that these measures make our environmental footprint smaller.

Our State governments now allow companies to drill and sink bores thousands of metres below the ground, then pump thousands of litres of hazardous and toxic chemicals mixed in with millions of litres of water under high pressure to fracture the coal seam and effectively cause what has been described as a "mini" earthquake, which then rather indiscriminately, and with minimum control, releases methane gas which hopefully will travel back up the same pipeline.

The industry then claims that it pumps all the water (and chemicals) back to the surface for disposal. On a recent American TV series known as "Licence to Drill" shown on ABC 2 on 17 August, a TV series that was essential produced to glorify the drilling industry (both oil and CSG). A "fracker" is shown at the conclusion of the fraccing process as saying "we're only going to get 20% maybe 25% of that water back. We've pumped in a couple of lakes..." (and laughs!). The obvious question is, "What happens with the other 75-80% of the water? In this specific episode the "frackers pumped in 25,000,000 litres of water and 1600 tonnes of sand down one well. Yet the industry claims that it pumps all the water out. A copy of this vision can be made to the Committee.

Currently, all of this type of activity is carried out without any independent overview or supervision with the only threat being if a company pollutes or has 'an accident' it may be fined and ordered to rectify the damage.

The CSIRO is on public record as stating that to rectify damage to aquifers from CSG may take up to several hundred years. And someone is yet to explain 'how do you rectify poisoned aquifers?'

In legal terms the usual remedy for damages is a fine and an order for rectification. Following the same logical approach what is the process to rectify poisoned aquifers, springs, streams, creeks, ponds and rivers. A fine is not, and will never be, a suitable remedy!

Further, given that this 'new' industry is essentially in its embryonic stage of evolution there is very little published information, or studies which have been carried out, that can reasonably substantiate that CSGM is safe. Conversely, there is significant and available evidence both in the USA, Canada and now Queensland that demonstrates that incidents and "accidents" occur regularly, confirming the allegation that the process is unstable. Further, it appears that there is very little published literature, which clearly outlines and understands all of the relative implications of the fracking process. There is some degree of predictability, but it by no means is certain nor accurate.

In Australia thus far, we have resisted the temptation of the introduction of nuclear power generation, and with good reason, given the recent experience in Japan at the Fukushima Plant. This incident clearly demonstrated that the 'experts' did not, and could not, get it right!

Global natural disasters are becoming more significant and prominent. The risks of CSG mining being exposed to such events could have disastrous consequences. In the United Kingdom CSG drilling has now been banned in certain areas due to the claim that the drilling had brought on an earthquake. It is also understood that a much larger earthquake of around 6.0 magnitudes was caused by CSG drilling in Kazakhstan.

It seems we have already forgotten that in our own region, Newcastle was devastated by an earthquake measuring 5.6 on the Richter scale back in 1989. In that disaster, 13 people died and nearly \$4b in damages was recorded. At the time, it was claimed by some experts, that the earthquake was caused by mining in the area. The Hunter area has a history of earthquake activity. According to Geoscience Australia earthquakes of this magnitude occur approximately every 18 months in Australia. The seismic implications of CSG drilling are certainly not well understood nor studied!

We do not live in a time of a global war!

We do not live in a time of a world recession (which requires significant energy resources)!

We do not live in a time where significant natural disasters force us to resort to extreme measures.

We do not live in a time of any major crisis that challenges our Country.

So the question that is consistently asked is "Why does our government need to deliberately place our land, our water, our stock and our people in harms way, with a risky, immature, toxic process, which serves only to fuel the economies of foreign countries and large and significant multinational corporations? It makes no sense!"

What is even more alarming is that it appears that our State Governments is prepared to sell out our land, water, stock and put us all at risk for such a low, low 'price'. For the next 5 years the NSW State Government will not collect one cent of royalties, from Coal Seam Gas Drilling. Studies in the United States show that each site after the initial yield, significantly falls off and the sites are moved every 5 to 7 years. This royalty free holiday is clearly a most important reason why the CSG companies should not be permitted to cherry pick and terrorise the easiest and our best regions at no risk of impunity.

If this industry is so critical, and so important, then it should be totally controlled, regulated, cautiously policed, AND POLICED.

It should be introduced and evolved in NSW in a manner, which will have and create the least possible harm to our key regions, our water, our land, our environment, our people and our existing enterprises.

The industry should be introduced and limited to locations that are least likely to feel significant damage to land, water, environment, local communities and their existing characteristics, structures and economies.

At the present time the Government simply allows exploration to occur everywhere, and all over our State.

Exploration should be limited, and controlled. It should not just be through a process of accessing whether the region is "prime agricultural land" but through a structure, which accesses all the relative merits and considerations determining regions, which are of State Significance. Areas should be closed off as 'No Go Zones', specifically areas which already have flourishing activities, economies, sensitive land and water characteristics, which will be significantly jeopardized by the introduction of CSGM.

The Manning Valley is one such Region!

Our Valley and its' economy incorporates a range of diverse and complimentary agrarian and tourist activities in a rich and significant biodiversity of floral, fauna and pristine water.

This unique Region should not be compromised and exposed to the risk of CSGM.

CSG drilling should be viewed and seen as experimental and should be controlled. The risks are too great and it will be too late if significant damage is caused to the aquifers and the water table below the Manning Valley.

These days significant environmental accidents seem to occur throughout the world practically every year. Those involving natural resource harvesting inevitably have dire consequences such as with the recent Gulf of Mexico oil spill, off the United States. This impacted upon the States of Florida, Louisiana, Mississippi, and Alabama, causing billions of dollars of damage with consequences that many communities across the United States will face for several generations - not to mention the damage to the environment and to the biodiversity.

Given our geographical outline, a CSG accident in the Manning Valley could have overwhelming damage to our pristine water, land, biodiversity and consequently upon our economy and way of life.

From a social perspective there is a significant stigma associated with CSG. Is it totally necessary to risk and impose CSG on a community and on an existing thriving economy, which is likely to suffer from such a stigma?

We live in Australia, not some third world dictatorship where foreign investments and interests dictate and impose on communities at will, or at the whim of government, without any due respect or concern for the implications on the people and the community.

Here in The Manning Valley we have not seen one single person marching down our main streets carrying banners and placards cheering and calling for CSG mining to be introduced. Nor do we see our Business Chamber of Commerce calling for CSG mining for our Region.

The people of the Manning Valley do not want and oppose CSG mining in our district.

The balance of our submission contains specific matters in relation to community concerns and to considerations that should be taken into account in the control and regulation of CSG mining throughout NSW.

We thank the Committee for the opportunity to present this Submission.

3.0 The Manning Valley

You've just found the best place to 'Unlock the Secrets' of the Manning Valley

Turn off the fast lane, take a breath and meander. Pause awhile and discover the secrets of the Manning Valley.

You'll find the remnants of an ancient riverside rainforest close to the main street of Wingham, which is matched in appeal by the welcoming warmth of the locals in the main street who enjoy pausing to have a yarn with visitors. They are proud of their heritage town surrounded by beautiful bushland.

From the centre of Taree on the river there are scores of villages and localities in the Manning Valley beautiful coastal towns with lagoons, lakes and glorious reaches of the river meeting the sea; the quaint and quiet inland villages that serve the farms rolling over the river flats and surrounding hills; the dramatic scenery of the mountain country; the wildlife to be glimpsed in forests.

And while our past history of pioneering days seems very close, so too we see a promising future in growth and prosperity as families choose to make the 'tree and sea change' from over crowded cities.

As a visitor you'll appreciate the quality of lifestyle, the beauty, the people, that make the Manning Valley so special. I grew up here and have returned, feeling very, very lucky to call the Manning Valley home.

- Di Morrissey, Manning Valley Tourism Ambassador

3.1 Introduction

The Manning Valley is situated approximately three hours from Sydney. Surrounded by State and National Parks, interwoven with pristine springs, creeks and streams it is a unique area in terms of water catchment. The 250 km long Manning River is fed upstream by the Avon River, Rowley's River, Nowendoc River, Barnard River, Little Manning River and the Barrington River, which flows through Gloucester. Once the river reaches Taree it splits and the southern arm flows into the Pacific Ocean at Old Bar. The northern arm is joined by the Dawson River and the Lansdowne River, which meets the ocean at Harrington, hence the river has two separate entrances. It is the only split river delta system in the southern hemisphere, second only to the Nile in Egypt¹. It is one of Australia's few large river systems not to be dammed for water supply purposes anywhere along its catchment.

The local water supply is fed by Bootawa Dam, which is an offsite dam, however, water is pumped from the river to the dam whenever river turbidity and flow levels can allow. MidCoast Water is the local Water authority. It has inexcess of 28,000 customers. The balance of the Manning Valley Community rely on tank, stream, creek and river water for their survival.

The Manning Valley attracts over 250,000 tourists per annum, who come to enjoy our local beaches, rivers, mountains, waterfalls, lake systems, fishing, hunting, shooting, and all the natural beauty of the

area. Manning Valley Tourism have just launched their "Unlock the Secrets" and "Manning Valley ... naturally" campaign.

Tourism is a major industry in the Mid North Coast. According to Travel by Australians Report June 2009 (TRA) compiled from quarterly reports of the National Visitor Survey (NVS) spending by domestic overnight vistors, the Mid North Coast of NSW rated 3rd highest in all the regional areas with a \$1.4 billion spend, behind the Sunshine Coast and then Tropical North Queensland. Over 2.952 million vistors came to the Mid North Coast and they stayed in excess of 11.704 million over night trips. The Manning Valley is at the entrance to the Mid North Coast, our tourism supports 2600 jobs and over 1000 tourism businesses. Official estimates value tourism at in excess of \$140 million in 2009.

Retirees flock to this area as the land is reasonably priced, with good amenities, with clean air and ample access to unspoiled recreation activities.

The area boasts agricultural pursuits from dairy and beef farming, organic vegetable and vegetable production, cheese and yoghurt production, wine making, turf farms, nut orchards, cut flower production, fishing, prawning and oyster farms. Our pristine water flows from the mountains where native flora and fauna abound. Many species of crustaceans, amphibians and marsupials are threatened or endangered. Of these, any aquarian species rely on the purity of the Manning Valley's waterways. MidCoast Water support Platypus Conservation because the platypus populations which thrive in the Manning Valley, are declining across the state. The quality of water in tributaries of the Manning River is second only to the melting snow caps in Kosciusko National Park².

3.2 Communities

Urban dwellers in the Manning Valley reside in unique settings. Taree, the largest township, is situated on the banks of the Manning River. Radiating from here are villages, separated by State and National Parks, uncleared forest and farmland, each with their own character. Residents of Old Bar, Wallabi Point, Crowdy Head, Harrington, Mitchells Island, Manning Point, and Oxley Island enjoy beachside settings. Whilst historic Wingham, Tinonee, Mount George, Krambach, Wherrol Flat, Mooral Creek, Killabakh, Marlee, Bobin and Elands enjoy quiet rural settings. New residents and visitors are attracted to the Valley by its diverse natural beauty. Due to our proximaty many residents of Sydney are relocating to the Manning Valley.

4.0 Sustainable Development

Manning Valley Inc. states that any mining or associated infrastructure within NSW should be developed in accordance with Ecologically Sustainable Development (ESD).

Before ESD can be introduced, in the planning process it is imperative that documented base-line statistical data is established by an independent body before any approvals are given.

^{1:} Wikipedia

^{2:} Independent Water Analysis

This would include legislative provisions for:

- > The precautionary principle³;
- > Inter and intra-generational equity;
- > Conservation of biological diversity and ecological integrity;
- > Internalisation of environmental costs; and
- > Polluter pays principle⁴.

For the CSG and mining industries to become sustainable there is a need for a review of the assessments of environmental impacts within current legislation. These should include the following:

- > Undertake a comprehensive study of competing land use;
- > Clear processes for assessing potential cumulative impacts, these plans should also take into account social, economic and environmental impacts;
- Within the planning process there should be established areas of NSW where mining operations are prohibited based on assessments of environmental, water supply and agricultural value;
- > Conduct a comprehensive review of the impacts of mining on water resources and water use in NSW.
- Establish planning processes that identify all competing land uses in an area proposed for new planning operations; conduct water audits of current operations before new or expanded operations are permitted;
- > Implement the precautionary approach to assessing underground mining impacts on water issues;
- ➤ Identify baseline data in relation to aquifer water systems and how the water quality and quantity of these systems are impacted by factors such as subsidence resulting from underground mining/CSG operations;
- ➤ Integrate mandatory concurrence approvals with other legislation, in particular Threatened Species Conservation Act, 1995; the Water Management Act 2000; and the Native Vegetation Act 2003; and the Environment Protection and Biodiversity Conservation Act 1999.
- > Identify impacts of mining/CSG operations on flooding:
- > Identify impacts of mining/CSG operations on the surface water regime;
- Introduce regulatory reforms to improve management of chemical releases (acid mine drainage), fraccing and drilling fluids and produced water;
- Introduce regulatory reforms to improve management of heavy metal contamination (eg: arsenic, cobalt, copper, cadmium, led, silver, zinc and chromium) and is often released during the mineral extraction process.
- Establish mandatory buffer zones to exclude CSG mining activities in relation to rivers, wetland and watercourses. This area should be debated, but it is our proposal that this should be a further 1km from the end of the directional drilling zone.
- Ensure that decisions are informed by the best possible science and full consideration of alternatives. The minister should consider reports from an independent scientific commission.
- Clarify regulatory obligations to provide better management of abandoned and decommissioned mines and introduce mandatory Environmental Bonds.

^{3:} Defined in principle 15 of the Rio Declaration (1992); where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

^{4:} ESD is to in numerous pieces of legislation in NSW, and the accepted definition can be found in the Protection of the Environment Administration Act 1991, s6(2)

In the absence of clear and comprehensive regulatory requirements approvals such as the 110 gas wells in the Gloucester Basin by the NSW State Government will continue to occur on an ad hoc, inconsistent and incomplete basis. During this process the Director General's Requirements did not require the proponent to consult with the Gloucester Shire Council about the impacts on the Gloucester water supply. Therefore, this potentially devastating impact was not addressed in the environmental assessment. Introducing the amendments listed above this would substantially reduce the negative environmental and social impacts that often accompany coal and gas mining operations in NSW.

The CSG industry is still in its infancy in NSW and despite this there are key potential impacts, which have been identified.

For example, the National Water Commission (NWC) identified the following potential risks to sustainable water management in their Coal Seam Gas Position Statement⁵:

"Extracting large volumes of low-quality water will impact on connected surface and groundwater systems, some of which may already be fully or over allocated, including the Great Artesian Basin and Murray-Darling Basin.

Impacts on other water users and the environment may occur due to the dramatic depressurisation of the coal seam, including:

- > changes in pressures of adjacent aquifers with consequential changes in water availability;
- > reductions in surface water flows in connected systems;
- > land subsidence over large areas, affecting surface water systems, eco-systems, and irrigation and grazing lands.

The production of large volumes of treated wastewater, if released to surface water systems, could alter natural flow patterns and have significant impacts on water quality, and river and wetland health. There is an associated risk that, if the water is overly treated, 'clean water' pollution of naturally turbid systems may occur.

The practice of hydraulic fracturing, or fraccing, to increase gas output, has the potential to induce connection and cross-contamination between aquifers, with impacts on groundwater quality.

The re-injection of treated waste water into other aquifers has the potential to change the beneficial use characteristics of those aquifers."

In addition to these water management risks, CSG development could also cause significant social impacts by disrupting current land-use practices and the local environment through infrastructure construction and access.

A recent report by the Department of Sustainability, Environment, Water, Population and Communities highlights concerns regarding CSG extraction and its potential interference with hydrological systems. The report recommends:

^{5:} Available at hppt://www.nwc.gov.au/www/html/2959-coal-seam-gas-asp?intSiteID=1.

"Given the resulting levels of uncertainty in relation to ... a number of CSG developments; a precautionary approach should be taken in relation to approving proposed and potential CSG developments, recognizing the fundamental principle that excessive rates of groundwater extraction will have impacts on groundwater and connected water systems"

It is essential in any approvals process that benchmarking and ongoing monitoring of environmental systems applies. Without sufficient baseline data on environmental systems (such as sub-artesian water flows and locations and all hydrology covering impacted areas) it is impossible to accurately ascertain the true impact of processes associated with coal and gas extraction.

5.0 Industry Regulation

To date there appears to be little or no regulation in regard to abandoned and leaking exploration wells. Recent case laws have highlighted significant problems with compliance and enforcement, and it is clear there is a need to increase monitoring to identify potential breaches of conditions of mining operations and secondly when breaches are detected there is appropriate punitive and remediation orders applied. Cases such as *Minister for Planning v Moolarben Coal Mines Pty Ltd*⁶ are representative of a trend by courts to deliver inadequate penalties for breaches of the legislation⁷.

In order to make regulation of the industry more effective, legislative review needs to occur to introduce new provisions such as:

- Providing the Minister with the powers to suspend/revoke approvals for breaches of conditions; or
- > Providing for a process where landowners, as well as regulators, can apply to revoke consents if mining operations breach conditions; and
- > The introduction of strict liability offences.

The potential for mining/development consents to be revoked as a result of breaches should provide a greater deterrent than financial mechanisms alone. There should be a greater emphasis on the monitoring and compliance regime to ensure all legislative requirements and conditions of consent are adhered to.

6.0 Consultation between Government, Industry and Community

The matter of Part 3A of the Environmental Planning and Assessment Act 1979 is of great concern to the community. Although the incumbent government vowed to overturn this section of the EPA, unfortunately their efforts have not gone far enough. The issue of the government owning the Resource (under landholders properties), receiving vast amounts of money for the licensing of exploration and production licence approvals, receiving vast royalties, and having an in-house approvals systems which effectively does not allow any community participation until after

^{6: {2010}} NSWLEC 147.

^{7:} In that case the court noted that the "sentence of the Court must operate as a powerful factor in preventing the commission of similar offences by persons who might be tempted to do so by the prospect that, if caught, only light punishment will be imposed. This statement of principle has particular resonance in the context of development carried out in contravention of the EP&A Act. Despite such a statement, the Court in that case only issued the fine of \$70,000 to the proponent who had cleared a large portion of an Endangered Ecological Community. It could be argued that such a penalty would be fairly insignificant to "a corporation engaged in a multimillion dollar coalmining project, an activity which in all its aspects had the potential to have a very significant impact upon the environment"

Approval. Public objections have then to be brought to the Land and Environment Court. At this point it is a David and Goliath situation where the mining companies can afford legal representation, whilst the landholder is limited by their financial means. This is a very unevenly weighted argument.

Legislation needs to be introduced to guarantee rights of community consultation and public participation in the relevant mining and planning legislation for all proposals for exploration and production. This legislation should ensure early notification requirements for landowners adjacent to mining operations and that before any operations take place the free, prior and informed consent of landholders is obtained. It is also important that any community group or relevant stakeholders (particularly relevant where concerns of cultural heritage arise) are made aware early in the process of mining activities that may impact on their rights. Specifically, relevant legislations should include the following features:

- A requirement that all public submissions be given to an independent decision maker (as opposed to only a summary of those submissions for example);
- A requirement that the independent decision-maker must demonstrably take into account public submissions when assessing a mining project application;
- > Provide that the decision-making process is undertaken according to clear objective criteria and legislative limits, placing ESD and its principles at the centre;
- Provide for merits appeal rights and judicial review rights for objectors and proponents;
- Allow open standing to apply to the Land and Environment Court for stop work orders, interim protection orders and notices regarding threatened species, heritage and pollution in relation to mining projects.

7.0 Landholder Rights

When mining companies identify an area within their Exploration Lease that necessitate further testing and requiring entry to a land owner's property, upon approaching the landowner they should: identify themselves by company name with relevant details and ask the land owner for access. The company should supply a full "disclosure statement" before access negotiations should be commenced. This should clearly state that the landowner should seek legal advice to negotiate this access agreement.

If the land owner feels that there are insufficient grounds to prove that the mining operators need to explore on their property and feel compelled to legally fight the mining operation they should have access to a fighting fund which is funded by a levy imposed on the CSG companies which is specifically designed to assist land owners.

Landowners should have a level playing field in regard to compensation for their property. Compensation should be set at a pre-exploration dollar value, with the opportunity for the land owner to lease back the farm and continue their enterprise if it is environmentally and commercially viable. Upon the de-commissioning, abandonment and rehabilitation of CSG mining sites on that property, it should be offered back to the landowner at a post mining dollar value.

8.0 The CSG Myth

There has been much stated by the incumbent Federal Labor Government regarding our carbon footprint and the "dirty coal debate". The Labor Government are espousing that CSG is a "clean, green

alternative" energy source and that the carbon footprint of the CSG industry is far less than the coal industry. This is because CSG's footprint has not been measured in a "whole of lifecycle" study. In the Cornell University study by Professor R Howarth⁷ it states that if a "whole of lifecycle" approach is taken for CSG as opposed to coal, CSG has a heavier carbon footprint.

9.0 Health Concerns

The NSW Government should recognize not only groundwater and surface water contaminations as having public health implications, but the effects of noise, traffic, light intrusion from CSG plant, nuisance value and air pollution should not be "minimized" – Manning Alliance Inc. suggests it should be negated.

In its submission to the Senate Inquiry into Coal Seam Gas in June 2011, Doctors for the Environment⁸ outline in great detail that there are many health risks associated with CSG.

10.0 Food Security

10.1 Global Food Security:

Falls into two key areas namely, Food Supply (Availability), and Food Safety.

Directly to the north of Australia, a market of over 3.5 billion people exists for food. More than half of the world's population is in our region and our direct sphere of influence. Many of these countries have ever increasing living standards and with this comes a greater demand for **higher quality food**.

Fast Track China estimates that The Peoples Republic of China has a population of 1.3 billion people with a middle class of in excess of 300 million people. India has a similar sized middle class, coupled with Indonesia, Japan, Korea, Taiwan, Hong Kong and the Tiger Countries of Singapore, Malaysia and even Thailand, has a "middle class" market of nearly 1 billion people which is available to purchase higher quality, Australian grown, produce.

As Asian economies continue to grow and expand their living standards have followed. As such there has been an increase in demand for high quality, "naturally grown" produce. Seafood, pasture fed and grain beef, lamb, pork, and chicken.

At the same time the overall world population also continues to grow and thus there will be a greater demand for food and ultimately "clean" water.

The opportunities for Australian grown produce will become more and more significant. Particularly so within the area of boutique food. As an example, and not in our region, but in the United States, they have had significant national food recalls issues. Boutique produce segments such as "locally grown and raised" pastured fed beef and pork have become extremely popular and have attracted significant price premiums.

^{7:} R. Howarth, R Santoro, A. Ingraffea, "Methane and the Greenhouse Gas Footprint ..." Cornell University, 12/4/11 (www.springerlink.com)

^{8:} Doctors for the Environment Australia, Submission to Senate Inquiry into Coal Seam Gas, June 201

The Asian culture and philosophy towards food is even more advanced.

Asian consumers like to purchase and eat fresh, naturally grown produce. Australia is viewed in all of these countries as a natural wonderland – a paradise with a clean, clear environment, clean water as a producer of "clean pure foods". We do not have "avian flu", we do not have "mad cow" disease, we do not genetically modify. All of the aforementioned elements are very attractive to a market which is very concerned about food quality, given the environmental and other food related difficulties in their own countries.

The Asian Middle Class Market is very brand conscious and can clearly and easily differentiates international suppliers of produce. As an example in China, New Zealand butter is regarded as the "best in the world"; it attracts a premium, and represents quality.

Asian society lives on "face". The Asian middle class usually dines out much more than eating at home. When they order food, if available, they like to select the produce of certain highly regarded countries, such as Australia. Australia beef is highly regarded in China and particularly in Shanghai. Many restaurants now identify and indeed highlight the country of source for much of their produce. This trend will only continue to grow.

In Australia, and indeed within the Manning Valley, there are many boutique producers of high quality, naturally or organically grown produce. These enterprises need to be encouraged and nurtured for future global supply of food. The American experience of establishing and operating factory farms is now clearly demonstrating significant flaws and faults with an industrial approach to food production.

This method of food production is now being questioned and rejected both in the United States and around the World and in many areas there is a return to small farms, which as an example are producing high quality naturally raised, pasture fed beef, pork and lamb.

Here in NSW we have many small farms. Incentives need to be provided to farmers to stay on the land, to work their soils, and enhance the biodiversity and the environment. History shows that it is the small business people and farmers who drive innovation and change through competition based upon increasing quality.

In the cities small business is critical to the economy, the farm sector can also play a similarly key role in the future, by creating jobs and employment through increased demand for quality "boutique" Australian foods, which can and will be exported throughout the World.

All of the conditions are highly favorable and indeed are falling into place for a significant resurgence of the NSW farm sector to play a key role in food production and specifically, high value "naturally grown" foods. The Manning Valley is at the heart of this.

We should be very careful not to risk, damage or cause disincentive for small farm sector growth. Coal Seam Gas Mining is a clear and present danger to this sector.

What our export agents need to do and understand, is not take the easy route and undervalue Australia produce and consequently sell it too cheaply! They need to earn their money, by value adding on the quality and the production process of our food, which is grown in a clean, healthy environment, with pristine waters, and being disease free.

10.2 Access to Markets: The Manning Valley is ideally located for food production and distribution with easy access to rail and its access to the Pacific Highway for road transportation.

Locally we already host thriving local farmers markets and initiatives such as the Manning Valley Produce Dinners, Harvest Trails, local cookery school and award winning restaurants and cafes.

- 10.3 Soils: The Manning River has over 350 tributaries; many are surrounded by rich alluvial river and creek flats. Leading down to these river and creek flats are undulating hills through to mountain tops with varying soil types which support beef cattle production, market gardens, nut tree production, and agro-forestry projects.
- 10.4 Rainfall: The average annual rainfall in the Manning Valley is approximately 1200-1400mm per year and its distribution is very even throughout the year. September is the driest month with an average rainfall of 60mm. Such even plant growth is ideal for plant growth.
- 10.5 Climate: The Manning Valley is a temperate to sub-tropical climate that provides excellent growing conditions suitable for a large range of vegetable, horticulture, viticulture and pasture species.

Australia is one of the driest continents in the world. Water scarcity and desertification are becoming more prevalent in areas of Africa, China, and across the Mid Western Grain belt of the USA.⁹

Areas such as the Manning Valley which have good access to both Newcastle and Sydney markets, arable land, with excellent rainfall and climate are rare and the preservation of these areas for agriculture, heritage value and tourism should be considered a top priority.

11.0 Council Infrastructure Levy

When CSG mining is introduced to an area there is a large amount of machinery trucked in to build the infrastructure of the CSG mining on site. Drill rigs, equipment, steel, cement etc.

In many instances there is also a need to truck in tens of millions of litres of water and thousands of tonnes of sand, per well.

Added to this is the ongoing transport activity during the life cycle of each well, the transport of the gas out etc.

Now that the NSW Government has banned the use of evaporation ponds, produced water will have to be transported for processing. The cost to Councils in maintaining local roads and infrastructure is enormous. Therefore it is not unreasonable to suggest, and expect, that the CSG industry would and should contribute to, and pay a levy to maintain and upkeep the Councils road system, upon which they put undue pressure, with added CSG related traffic.

12.0 Questionable Technologies

Recently on the ABC News mining magnate Clive Palmer has reported that a leading Chinese company has told him that the CSG extraction techniques used here were abandoned in China twenty years ago. Mr Palmer concluded: "CSG technology currently used in Australia is lethal and will kill Australians, poison our water table and destroy the land." 10

13.0 Advertising Campaign by CSG Industry.

The Coal Seam Gas Industry has recently initiated a television advertising campaign. Advertisements range from the "warm and fuzzy" commercial praising the industry as a good corporate citizen making donations to hospitals, to highly misleading commercials minimising the impact of CSG mining on the land.

One commercial shows a CSG well as a small unintrusive site. The producers, the Petroleum Industry, deliberately fail to show the impact on the land and the disruption that is caused when the well is in the process of being constructed, nor do they show the proximity of any other wells that usually link up and around this "single solitary well", nor any other infrastructure. This is type of advertising is highly inappropriate and untruthful and grossly misleading. The images and voice over, project such innocence, suggesting that there is absolutely nothing for people to be concerned about. If and when environmental damage is caused by the CSGM then these commercials should be used in the prosecution of the offenders.

Another advertisement is spruking the benefits of CSG as creating additional jobs. The jobs argument has also been rather skewed and somewhat misleading. Whilst the industry and Governments, at various levels push the argument that CSGM will create new and additional jobs they deliberately fail to recognise and acknowledge that many, many more jobs will be lost as a result of the imposition of CSGM. If our assertion is invalid or incorrect then the CSGM industry and the Government should clear state: "that no existing jobs will be lost, and local economies will not be jeopardised nor negatively impacted or transformed".

Further the Government should publicly warrant that no jobs would be lost with the introduction of CSGM to a regional area!

CSGM Mining Companies should not be permitted to air misleading advertising.

14.0 Political & Bureaucratic Corruption

History has shown, throughout the world that in both first world countries and third world countries the scope for the growth in political corruption is significantly magnified when "new" or emerging industries are rapidly introduced into a country and it's economy.

Examples of this can be seen in the petroleum industry throughout the world, in the United States, Africa, South America, and the "new" Russia. Situations where a natural resource having a significant dollar value is exploited in a rapid and dynamic fashion leaving the lawmakers and regulators well behind in its overview, supervision and control.

There are now very strong and serious questions emerging out of the systemic rollout of the Coal Seam Gas Mining industry in the United States!

This industry, given the projected levels of investment proposed in Australia, can potentially develop into the richest and most "influential" in this country and possibly throughout the world, particularly given the claims that Australia alone has CSG deposits that can supply this country with gas for between two to three hundred years.

The most widely used definition of corruption is the World Bank's working definition: "abuse of public power for private benefit".

Other definitions include:

"abuse of public authority and power for private benefit".

"Political corruption is the use of legislated powers by government officials for illegitimate private gain."

It is quite common throughout the world for Government leaders and Senior Civil Servants to abuse their political power to extract and accumulate for private enrichment, and use politically corrupt means to maintain their hold on power.

Political corruption takes place at the highest levels of the political system, and can thus be distinguished from administrative or bureaucratic corruption.

Political corruption takes place at the formulation end of politics, where decisions on the distribution of the nation's wealth and the rules of the game are made.

Bureaucratic corruption takes place at the implementation end of politics, for instance in government services, overview and regulation of an industry (such as CSG).

With the rapid evolution of the CSG industry in the world and particularly in Australia, the scope for both political and bureaucratic corruption at all levels is substantial.

The elements to this are very obvious and simple:

1. Power Preservation - There is an opportunity for governments (and individual members of Parliament) to retain and stay in power through the support and patronage of the industry.

- 2. There is an opportunity for individual political leaders (at all levels) to personally benefit in terms of enriching themselves during their period in government, whilst holding power and influence, and receiving the benefits "post holding public office".
- 3. There is also the opportunity for "politically created rent-seeking schemes".

On the demand side for example:

- 1. The industry is always looking for less government regulation and control.
- 2. Faster approvals.
- 3. The availability of more sites on which to mine.
- 4. Lower taxes and royalties.

And thus prepared to put forward inducements, pay bribes and/or incentives, and participate in politically created rent-seeking schemes, and reward politicians and bureaucrats for "past services".

The community is very concerned at what appears to be the excessive haste in both the introduction of CSG throughout the Country, and politicians all over the place practically falling over themselves in a rush to smooth over the way forward for the CSG Industry, and in the process ignoring all reasonable caution and risk assessment in the process.

CSG has been seen, and accepted universally throughout State, National, and even local political systems as the panacea to cure all of our environmental and energy woes.

Of particular public concern is the recent involvement of former senior Government politicians working as advisers to the industry, and in some instances taking on senior positions on Boards of CSG Companies.

As a result the public is very cynical and have very little confidence nor respect, in the manner of the rollout of the CSG industry, when they see former Government Ministers enriching themselves, practically overnight, through their apparent participation in the CSG Industry.

Currently the community does not trust, nor do they have any confidence in the roll out of this industry!

Here in Australia, thus far, we have been spared from the stigma of this type of political corruption.

Taking it back to Aristotle, the ancient Greeks had an understanding of corruption as a deviation from, or perversion of, sound government systems.

The corrupt motive is wealth, status and power, or more specifically self-enrichment, self-indulgence and power preservation (as contrasted to the non-corrupt political leader's concern for the well-being of the nation).

Modern day political corruption involves politicians; government ministers, senior civil servants and other elected, nominated or appointed senior public office holders. It involves a violation of existing laws and regulations, but it is not restricted to illegal acts. It is also political corruption when national laws and regulations have loopholes and are deliberately side-stepped.

Whether based on evidence or not, there is a clear public perception within the community that collusion and or corruptive practices, exist in the roll out of CSG.

Accordingly, there needs to be mechanisms cast into stone which do take into consideration and address political corruption, abuse of power, before it is too late!

Therefore we submit the following recommendations:

- 1. That ICAC (or some other agency) be specifically charged with task of overviewing potential corruption specifically coming out of the CSG rollout.
- 2. That all members of Parliament and Senior Civil Servants need to pass a "probity test" before accepting and taking up positions with a CSG Company, whether it be full time employment, consultancy or membership on a Board of Directors, should such an appointment be made within a seven (7) year period post their resignation and or departure from the Public Service or Parliament. This should also include Local Councils and Water Authorities.
- 3. That a public register be established, in full transparency, which records any payments or other forms of remuneration, loans etc that are made to either members of Parliament and Senior Civil Servants, Local Councillors and Senior Council Employee as well as Board Members of Water Authorities and senior executives of those organisations during the seven (7) year period of probity as outlined above.

15.0 Potential Implications of the Government's Royalty Free period of 5 years

The NSW Labor Government introduced a five-year royalty free period for CSG. An investigation should be carried out, and published, to allow the public to have a better understanding of why, how, and who made such a decision and clearly it needs to be justified.

One obvious argument that will be put forward is that the rationale was to create incentive for the industry to establish itself within NSW. In view of the potential windfall profits that this industry can and will make (as highlighted by the recent Australian Senate Inquiry) this decision is clearly, highly questionable, at best. This subject needs to be publicly reviewed and discussed. Literally billions of dollars of public funds have been whipped off and eliminated from this State's income. Surely this must be justified properly!

The implications of this type of decision are also very clear. Government has indicated that it is "very receptive" and prepared to be "very flexible" towards the introduction of the industry.

The new Liberal Government appears to be even more co-operative than its predecessor. This is of even greater concern.

In terms of the evolution of the industry the following now becomes quite obvious:

- 1. In being "receptive and flexible" the Government has allowed the industry to "cherry pick" the easiest and most convenient locations to initiate CSGM. This is why we have the problems with the industry aggressively attacking areas of prime agricultural land, tourist areas, and even suburban areas in our major cities.
- 2. For the industry, they obviously want to mine in the easiest locations, which provides for the easiest mining solution with lower costs, the easiest access: to our infrastructure, to our water, and to send the gas to their markets.
- 3. In this way the industry can recoup its investments faster, make more profit, and grow their businesses and move to the next stage.
- 4. In the next stage, which has already started, they will sell out, or they will either use the capital that they have made from existing operations or borrowed (or leveraged) to either acquire, other competitors, or "fight off" predatory takeovers, leading to the Gas Mergers and Acquisition Wars.
- 5. Given the money that is touted in the investment into this industry these wars will have significant impact and implication on the future of this country.
- 6. Clearly, political influence will be critical in this situation.

With the overall result that the public and the people of NSW, our land, our water and our environment will be the collateral damage.

16.0 Social Impact of Lack of Government Leadership and control over CSG

The handling and manner that CSG is either being allowed to evolve on its own, and the Government's position on CSG in its approach and presentation of this industry to the community is causing severe and mass anxiety and concern within the Community.

People really don't know and understand what to do. They appear to have very little, if any rights in the present situation. The community believes, and indeed it currently has, very few rights when it comes to dealing or negotiating with the CSGM companies. This situation is not fair, or reasonable, and it is **un-Australian**. There is "**no fair go**" with the CSGM!

The process is so contradictory to other forms of mining, where the landholder at least is offered the opportunity of being bought out. This opportunity does not exist with CSG!

Hundreds of landowners have attended Public Forums and Information nights hosted by the Manning Alliance on CSGM in the Manning Valley. The concern and reservations of the community are very grave.

Elderly people who have worked the land all their lives, and in many instances have, served our country in wars, situations where their families have owned their land for generations, are confused, frightened, disillusioned and feel a sense of hopelessness as they cannot understand, nor accept, that

this type of gross injustice can be imposed upon the people of this country, without them having the opportunity nor the right to defend their property from CSGM.

This is a very grave and indecent injustice and an abuse of the fundamental human rights that we have grown up with in this country. There are no critical nor dire circumstances, which justify people not having any rights in relation to the land that they have owned and worked all their lives.

We should not punish our people, nor our communities, in this fashion.

17.0 Risk Minimisation Strategy & Due Diligence

In all industries throughout the world the key words are "risk minimisation strategy" and "Due Diligence".

Where then, are our Government's **Risk Minimisation Strategy** and the **Due Diligence Report** for CSG? Who will cover the cost and fix the irreparable damage to aquifers and other potential environmental damage. This subject has been previously raised in this submission and yet it needs to be repeated. Perhaps a levy should be placed to pay for an insurance policy against any potential environmental damage. It will be interesting to see where any respectable insurance company will be prepared to take on such a risk, and what would the policy cost?

Surely, CSGM should be selectively introduced and limited to certain parts of the State, until the industry is mature and proven safe. Not the present approach, which appears to already accept that the industry is safe and that we should just lock out a few key areas from CSGM for economic reasons.

CSGM should only be introduced in areas where there is the least possible risk and potential damage to aquifers, the land, the water, our people and our biodiversity.

The Government needs to publicly put forward a Due Diligence Report and outline a Risk Assessment and Minimisation Strategy for CSGM.

Should these "documents" fail to consider and take all proper reasonable and necessary precautions, then public should have a right to sue the Government, individual ministers and members of Parliament who endorsed the introduction of CSGM, as well as the CSGM companies.

Our Country is currently addressing the issues of Global Warming, but are we trying to fix Global warming by destroying our land, and our water? Is it enough to have cleaner air and slow down global warming, but no food or water (and land) to adequately and properly sustain humanity?

18.0 Gaol Time for Executives and employees of CSGM Companies.

Our water tables, aquifers, environment and our biodiversity are of such critical importance that they should, under no circumstances, ever be compromised. Therefore we recommend that gaol time penalties should be introduced for employees and executives of CSGM Companies who knowingly or otherwise permit, encourage or ignore the use of toxic chemicals during the CSGM process, and/or if

proper due diligence is not carried out to fully ascertain the environmental safety of a drilling or testing operation.

19.0 Exploration Licences

These Licences be stringently controlled and there should be a quota and a limit on the number that are allowed, or renewed, each year.

Licences should go through a number of processes before a licence can be issued.

Any exploration application should be reviewed and endorsed (not necessarily approved) by Local Government. In this manner Local Council can record their objections.

Similarly, Local Water Authorities should review and endorse exploration licence applications and record their endorsements and/or objections.

The practical application of the review by these bodies can be carried out seamlessly with minimal impact or intrusion on the applicant. The applicant would lodge one application with a Statutory or Independent Authority which would then promulgate licence applications to the relevant areas, for review and endorsement.

The applicant should pay a fee for all relevant reviews by the respective agencies.

Prior to a licence being issued the community should be given the right to comment and consult.

Once a license has been issued over a region and/or a community, the details of such a license should be properly promulgated to that region and community by way of the following:

- 1. Clear and concise advertising in the local media, both radio and print. The present form of advertising is very unclear and inadequate for the reasonable understanding by the community.
- 2. A letter drop should be carried out in the nominated exploration area, advising all residents of the exploration licence and its terms, conditions and area of coverage, in very clear, simple and concise language. (Currently the electricity providers do letter drops when there are interruptions to power.)

Should an exploration licence holder carry out any aerial prospecting or surveying then again the community and all relevant government agencies should be informed. This should be carried out in the manner expressed in points 1 & 2 above.

Should any agents or employees of exploration companies approach members of the community to make access arrangement then those agents should:

1. Carry proper identification, Letters of Authority, and a copy of the Exploration Licences. Such a Letter of Authority should clearly indicate the level of authority of the holder.

- 2. Agents of exploration companies should not, under any circumstances, be permitted by law to enter people's property without either an express invitation in writing or a legal instruction issued by a court of law.
- 3. As previously indicated any such agent should provide to the landholder a full and concise disclosure statement, pertaining to all landholders rights and stating that the landholder needs to seek legal counsel in regard to access agreements.

20.0 Policing of Exploration Activities and Ultimate Mining Activities

Given the significant concern over the risk and possibility of environmental accidents caused by CSG, an Inspectorate should be established which is funded by a levy on CSG Companies. The inspectorate would overview and oversee the actual "fraccing process", during the drilling stage.

This could be implemented much like the current situation with customs clearance at bonded warehouses where goods cannot be released until cleared by customs.

Using this example an officer of the Inspectorate could be present during the drilling process.

The inspectorate should also have officers regularly policing and directly overviewing all CSGM operations at various stages with spot inspections carried out, and be immediately available during times of accidents.

The Inspectorate could also overview a Chemical Register that should be established and maintained. Sampling of chemicals going down the bore and coming back up could then be independently collected screened and monitored.

21.0 Extension of moratorium for a further 12 months.

There are so many unanswered and serious questions with CSGM that the prudent and responsible approach should be for the Government to extend the Moratorium on any new CSGM activity, including drilling and current exploration, for a further 12 months. The justification for this has been more than adequately outlined in this document.

22.0 Health and Mental Health Issues

One of the legacies of industrialisation in the last century was the introduction of asbestos, to the Australia Community. Used in a wide range of sectors such as building construction, insulation, pipes and brake linings, asbestos was touted by the industry and the politicians as the miracle building material, the cure or panacea for all our building materials and construction needs.

One of the leading asbestos mining and manufacturing companies was James Hardie Industries Ltd.

In Australia, there were asbestos plants in New South Wales, South Australia, Victoria, Queensland and Western Australia. Many of these asbestos products - including the building material known as "Fibro" - caused people to develop asbestosis and mesothelioma.

The total number of past and future claims made against James Hardie after 1986 for asbestos-related diseases is estimated to be more than 12,500.

The estimate of asbestos liabilities claimed against James Hardie was revised to A\$1.573 billion in 2003.

Current evidence from the United States indicates that there are presently many health related claims emerging against CSGM.

The Academy Award nominated documentary, "GasLand", focuses on the impact of CSGM on health (both human and animal), and the impact on water.

Clearly there is sufficient evidence to establish a prudent and responsible position regarding the possible medical and health implications from CSGM. There is now enough evidence available, which cannot be disregarded nor ignored.

BTEX chemicals and their "secret" substitutes (and the implications of their use) are of specific concern. Others potential effects include methane gas leakages, and carcinogenic chemicals, which may be produced and brought to the surface as a result of the drilling and fraccing process.

The other specific area of concern is that of Mental Health.

In a the recent story by ABC reporter Giselle Wakatama updated September 06, 2011:

"Doubts have been cast about the accuracy of emissions monitors near coal mines in the Gloucester region, north of Newcastle, with claims some have been covered or obscured.

Residents say they are worried about the impact of Gloucester Coal's Stratford and Duralie mines.

They have given the ABC photographs showing cracking in houses and headstones in a local cemetery attributed to blasting.

Keith Whittall says his house is falling apart.

"There's not a wall on my lower level of the house that has not got a crack in it," he said.

"I've even noticed another six foot one in my front patio".

Mr Whittall says there's also an emotional and physical toll and believes his stroke and nervous breakdown can be attributed to the stress associated with mining.

"My life has absolutely been destroyed by it," he said.

"I don't know what I'm going to do now like I am emotionally and physically and mentally just about at the end of my tether."

Mr Whittall says he wants to move but cannot get what he believes is a fair price for his property.

Amanda Albury says she is worried about monitoring data, after observing noise monitors that she claims had been covered.

Ms Albury says she made the observation after viewing photos provided by a local property owner.

"You can see the noise monitor is completely bound up in shade cloth and chain," she said.

Residents also blame mining for what they claim are lower fertility rates in local cattle and increased numbers of mares aborting foals.

Gloucester Coal says it conducts its monitoring in full accordance with its approval conditions and is urging anyone with concerns to raise them with the company.

It says its monitors have a microphone with a specially-designed cover and operate in accordance with

its consent conditions.

The company says it also complies with its blasting conditions and is not aware of concerns relating to impacts on animals.

Gloucester Coal's own figures show it exceeded blast requirements at its Duralie mine three times since 2009 and received 59 complaints over the past two years."

This story is only one example and it focuses on the physical and mental problems of one man who cannot now sell his property in Gloucester, for a "fair price" due to the mining, which was imposed in his area.

As we have previously indicated in this submission the legalised imposition of CSGM on landholders may have devastating psychological effects on many, many people.

Depression, overwhelming anxiety, even suicide come into play when people do not understand nor are able to cope with the legalised imposition of activities such as CSGM upon their lives.

Many people just cannot comprehend nor deal with what they view is a "legalized betrayal of their ownership and their basic human right to own property". Many people work hard, they borrow money purchase a home and land (a farm), pay off the interest, try to do the right thing by the community and their neighbors, they pay their taxes, and suddenly a CSGM company can invade their property, take control of key sections, exclude them from sections of their own land, and the Miner has the right to access the property at any time day or night.

Clearly this is a recipe designed for both physical and mental health issues!

The Manning Alliance has counseled several persons to seek medical advice due to their fear and overwhelming anxiety specifically relating to the potential imposition of CSGM.

Such anxiety does exist within our Manning Valley community: and among both young and older people! One young mother has commented saying "Did I do the right thing in bringing these young children into the world, for this!

Physical and Mental health clearly needs to be considered, and provision needs to be made for the impact of CSGM upon the health of the community at large.

Once again, consideration needs to be given, and now, before any great harm is caused to members of our community. A dedicated fund needs to be established to deal with these potential, and quite specific, physical and mental health issues.

Any such fund should be developed from a levy on the CSGM Industry.

Conclusion

It is the Manning Alliance Inc.'s opinion that based on the above environment, health and safety, and social implications of CSG mining which has been undertaken to date - considering that CSG mining has been banned and/or restricted in overseas countries, has been closed down by the EPA in the Margaret River area of Western Australia and operations have been closed down on health and safety aspects in Queensland, local councils within NSW have voiced their opinions that they do not want CSG mining in their area - it is our opinion that it is not unrealistic to ask that a total moratorium on CSG mining be placed within New South Wales whilst the true impacts of CSG mining operations are exhaustively and independently assessed.

The Manning Valley should be reviewed and classified as a region of State Significance and should be permanently locked as a No Go Zone for CSGM.

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Further Information

Further Information may be obtained from:

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