

Submission
No 366

INQUIRY INTO COAL SEAM GAS

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**SUBMISSION TO THE NSW LEGISLATIVE
COUNCIL COAL SEAM GAS INQUIRY**

September 5th, 2011

SOUTHERN HIGHLANDS COAL ACTION GROUP

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Introduction

Southern Highlands Coal Action Group (SHCAG) welcomes the opportunity to make a submission to the NSW Legislative Council Coal Seam Gas inquiry. SHCAG is a non-political community organisation with over 3500 members, based in the Southern Highlands of NSW. It was formed in August 2010 in response to the threat from Coal Mining and Coal Seam Gas (CSG) developments across the Highlands.

The area we refer to as "the Southern Highlands" stretches from Thirlmere in the north to Marulan in the south and from Robertson in the east to Canyonleigh in the west.

We raise a number of issues, but the main one is about water. The key question is why would a government risk permanent major damage to the local groundwater supply in the Southern Highlands for the sake of short-term (and uncertain) returns from CSG extraction? The Southern Highlands lies within the Sydney's Catchment area and thus any CSG activity poses a risk to Sydney's drinking water supply.

While Federal & State Governments favour CSG development for reasons of economic growth, tax income and royalties, a growing number of people are questioning it. A few large landowners in marginal agricultural areas, and even the communities in those areas, may at present be supportive but, we firmly believe that, were those people made fully aware of the dangers of CSG extraction, most of them would want to know how their water, health and quality of life are to be safeguarded.

Many of those currently opposing are farmers of highly productive land who are concerned that their role in society as a food producer is under threat. Another large group of objectors are owners of small parcels of valuable land with special scenic value or with specialized

agriculture – vineyards, olive groves etc. – parcels of land that are characteristic of the Southern Highlands.

While this submission focuses on the threat of CSG extraction, we would like it to be noted that the Southern Highlands also faces the threat of large scale underground coal mining and many of the concerns on CSG extraction, particularly those affecting aquifers the landscape and land values, apply equally to the coal mining proposals.

SHCAG has worked closely with the Wingecarribee Shire Council in its deliberations on the CSG matter as part of the Community Coal Reference Panel , and we totally endorse their submission.

Key Points

- The proposed extension of the Coal Seam Gas industry to the Southern Highlands has caused great concern in our community. The areas of concern are detailed below, but the key issues are the serious threat to our aquifers, the proposed methods for handling contaminated water produced as part of the CSG extraction process, the impact on landscape and rural industry, and the effect on real estate values.
- Our organisation supports the concepts behind the new State Government's Strategic Regional Land Use Policy, in particular the additional transparency in applications for new coal and CSG exploration licences and the introduction of an Aquifer Interference Regulation.
- However, we are concerned that the application of these concepts only to "new licences" for coal mining and CSG means that the current unsatisfactory processes will continue to apply to large parts of the State, resulting in further damage to some of its most sensitive areas. Given the breadth of the existing licences, we believe there should be a moratorium on the expansion of activities (including further drilling and new infrastructure) under those licences, pending completion of "Regional Strategic Plans" under the new policy.
- We believe that the Southern Highlands should be "ring fenced" from these developments due to the unique character of the area, its dependence on groundwater resources and its location in the heart of the Sydney Water Catchment Area.
- Most importantly we believe that the Petroleum Onshore Act (1991), which governs CSG extraction, and the Mining Act

(1992), which governs coal mining, should be revisited with a view to redressing the power imbalance between the miners and landowners regarding these developments. The Petroleum Onshore Act (1991) is particularly egregious in this regard as it fails to deal in any way with CSG and its unique characteristics or to take account properly of the threat CSG poses to the water supply for the broader community.

- Employment is a major concern for all communities and CSG extraction is often held out as creating more jobs. This may be the case in some areas; but SHCAG considers that it is not so in the Southern Highlands. We believe that there will only be a limited number of new long-term jobs created and there is the risk that a far larger number of permanent jobs will be lost as a result of the damage caused to farming and tourism in the region.
- It is difficult to understand why this rush to produce CSG has proceeded with such undue haste. The industry is just a few years old, there is no shortage of gas and there are technical issues with CSG production and the managing of the produced water that have not yet been fully resolved.

Coal Seam Gas – Background and Concerns

The situation with CSG in the Southern Highlands is as follows:

- Leichardt Resources, a small ASX listed company, holds the licence to explore PEL 469, covering the Shoalhaven region and much of the southern and western part of the Southern Highlands. This licence, along with many of a similar nature, was granted without adequate public consultation. Planet Gas, another small ASX listed company, has entered into a farm-in arrangement with Leichardt, and plans to conduct exploration in the licence area in return for a 50% equity share.

Planet Gas has announced plans for exploration in PEL 469, but due to a dispute with the Wingecarribee Council have placed these plans on hold.

AGL holds the licence for PEL 2, which stretches from Campbelltown through the central part of the Southern Highlands, but their activities are currently focussed in the Camden area.

- CSG occurs naturally in underground coal seams, the gas being held in the fractures or 'cleats' of underground coal seams by water and ground pressure. The gas is released by drilling wells into the coal seam and pumping out the water. Most wells are located 400–900 metres apart, and the produced water is saline and requires specialised treatment. At this point in time there are many ideas on how the contaminated, saline water should be handled, but a complete solution has not been agreed upon between Government and the CSG industry.
- CSG is a 'dilute' source of energy, in the sense that vast areas of land are required for its extraction. A CSG gas field has a large above ground footprint, and the companies involved generally own just enough land to secure their most critical operations. The rest they 'lease' from other landowners. Current legislation does not adequately protect landowner rights and conflict with the CSG companies has resulted.
- The practice of including confidentiality clauses in landowner agreements leads to a lack of transparency where the community is unaware of the total impact of a proposed gas field until it has become a reality. The confidentiality of these agreements can also disadvantage one landowner relative to his neighbours.
- CSG extraction threatens aquifers, both from the viewpoint of depletion of the aquifers and contamination. The use of the hydraulic fracturing technique (fracking), where large volumes of water mixed with sand and toxic chemicals are pumped into the coal seam under high pressure to enhance the flow of gas to the surface, increases the contamination concern.

Aquifer protection is a major issue in the Southern Highlands, as the target coal seam for gas extraction, the Wongawilli seam, lies immediately below the Hawkesbury sandstone strata that contains the aquifers on which the area depends. The dangers are threefold: (i) that Injection of toxic chemicals will pollute the water supply of a large part of the Sydney basin; (ii) that already toxic water will be released from within the coal bed in such large quantities that it will pose huge problems of disposal and (iii) that the extraction of water from the coal seam will inevitably lead to a rebalancing of underground water resources and the movement of water from the agricultural aquifers.

- The principal legislation governing CSG in NSW, the Petroleum Onshore Act (1991) contains no mention of CSG despite the clear differences between this process and conventional natural gas exploration.

- *The Act favours the rights of the miner against an unwilling landowner, who can be required to enter a six-year access agreement that allows exploration to go ahead through a mix of mediation and legal process.*
- *If CSG is discovered in the exploration process, the Government can grant a Petroleum Production Lease for a period of up to 21 years, with environmental objections being the only significant basis for the lease to be refused.*
- *The access agreement and related production lease pose a serious obstacle to any future sale of the affected land. This is of particular concern to holders of small parcels of land (in closely settled areas such as the Southern Highlands), where turnover is more frequent, and on whom the impact of the CSG operation falls most heavily.*
- *There is no compensation available to landowners in the current legislation for the impact of the CSG extraction industry on the value and saleability of affected land.*
- *The legislative changes required to provide a more even playing field for participants in the CSG industry are complex, involving more than one piece of legislation, and work is currently being undertaken on this front. The essential challenge is to ensure that the CSG operator retains responsibility well beyond the extraction period, and that the landowner rights built into a standardised Land Access Agreement are enshrined in legislation.*
- With its high rainfall, the Southern Highlands form an important part of the catchment for the Sydney drinking water supply. Two major storage dams, (Avon and Nepean) are located in this area and the water from here flows, via the Wingecarribee and Wollondilly rivers, into Warragamba Dam. It is because this area is so essential to Sydney's water supply that legislation, currently the Sydney Water Catchment Act 1998 and the Environmental Planning and Assessment Act 1979, has long placed very onerous restrictions upon the uses for land within the SCA area.

It is difficult to understand why those restrictions should not apply to the potentially very damaging activities envisaged to extract CSG, and for that matter, the new and equally damaging proposals for underground coal mining in the Southern Highlands.

- Small companies hold most of the CSG exploration licences, and any assurances given by these small CSG explorers on their

future operating plans are generally worthless. They are invariably bought out by organisations with the large capital base needed for the extraction phase. The larger operator will not be bound by previous assurances and may have an entirely different view on operational practice.

Suggested Regulatory Changes

In summary, SHCAG has great concerns over the current mechanism for coal seam gas development in NSW and in the Southern Highlands in particular. We appreciate the recent steps taken by the NSW Government for a review of this industry and appreciate the opportunity to contribute our views. We believe that the following safeguards must be secured in legislation:

- before any access to land is allowed, there must be a baseline study of the likely effects of proposed CSG activities upon agricultural land and vulnerable or interconnected aquifers;
- CSG proposals not to be allowed if there is any danger whatsoever to water supplies;
- primacy of protection for Water (as defined in Protection of the Environment Operations Act 1997 (NSW))
- where proposals are allowed to proceed, strict liability obligations on miner for pollution and contamination, as well as for monitoring, mitigation and rehabilitation;
- rights of the landholder to enforce those obligations directly against miner for time being;
- those rights to run with land;
- remedy for any breach of miner's obligations to be denial of access plus market value compensation determined by an expert;
- adequate security provided by miner to landholder from outset;
- "rehabilitation" to be defined to mean restore to baseline condition;
- landholder to have right to legal representation in any forum (not dependent on consent of miner);
- all costs of legal and other professional assistance engaged by landholder to be paid for by miner.