

**Submission
No 220**

INQUIRY INTO COAL SEAM GAS

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To the committee, thank you for conducting the public hearing on coal seam gas. This topic has been of great concern to landholders in the Manning and Wallamba valley regions and surrounding areas with numerous meetings to make everyone aware of the situation. It has created a lot of communication and discussion amongst the community.

Many of the details of safety, health, contamination surrounding coal seam gas extraction are not too well known even to the companies doing the actual extraction.

Whilst we understand the need to extract the gas to provide fuel for power stations, space heating and cooking, it must be carried out in a safe manner and free of any pollution, environment and health issues.

We wish to make some comments and opinions along with many questions that we believe the government needs to address with the granting of any licences to extraction companies.

American and Queensland experiences are that drilling and extraction companies make a horrible mess to the landscape and the contamination of soil.

I believe that before any further drilling occurs, there must be legislation in place under which the companies must operate. Although my general view is that we are over governed, history shows that companies will take advantage of their strong financial position to the detriment of small stakeholders.

In particular, there must be a risk assessment made for each site and the assessment made by a committee of the extracting company, drilling company, government representatives, EPA representative, local government, local community and the land owners.

Items in particular that must be addressed are

1. What happens if the company goes into liquidation? Does the government mop up any spills, contamination and closing off the well cap? In what time frame would this be completed? Should the company be made to put aside funds to cater for such a possibility? What if the company is purchased by an off-shore company as they may just walk away from the clean up mess? History shows that mop up and make good provisions often take years and land owners in this case would suffer unnecessarily. A trust fund with money inputted from drilling and extraction companies should be set aside for this eventuality.

2. What happens if the waste water leaks out to agricultural land and waterways and particularly how quick must the land and waterways be cleaned up? If there are more than one company extracting, who should pay when it may not be obvious as to who caused the spill or contamination?

3. What happens if there is gas seepage through the soil and is entering the air? There are numerous examples of this happening in Queensland and the US. These gas leaks are reported to make local citizens sick. Extraction companies do not

appear to take adequate and quick action to fix these leaks. They also drill too close to homes and other places frequented by humans and animals. The exclusion zone around living quarters and animal pens needs to be much greater than what is in the Act.

4. What happens if the underground water basins are contaminated? Who is the umpire? Who will be monitoring the before and on-going water quality? Although in my career was as an Engineer with emphasis in chemical process engineering covering pollution control and remediation, I do not know of any technology available to clean up a contaminated artesian basin. Does the government know how it will be done? With 22 companies from my count involved in coal seam gas extraction, how do we know which company may be the cause of the contamination? We saw with the BP drilling rig in the Gulf of Mexico that the company was not prepared with equipment to permit for a fast response to the leak capping. BP is saying that remedial work is basically complete whereas others say that there is still massive damage to the seaboard. So who will be the umpire that any corrective work has been adequately completed? As there are several companies in each state doing coal seam gas extraction, should there be a central set of capping equipment available or should each company have their own?

5. As an accredited Risk Assessment Facilitator in HAZOP (Hazard and Operability Studies), 'What If', FMEA (Failure Modes and Effects Analysis), JSA (Job Safety Analysis), FTA (Fault Tree Analysis) and PSM (Process Safety Management) analysis methodologies I put myself forward as someone for consideration to be on the risk assessment panel/team. The 'What If' method of risk assessment would be best for a general rural community to understand and be able to participate in the analysis. It is my view that drilling and extraction companies must have completed applicable studies prior to drilling and prior to extraction. Companies should have a PSM in place. The assessment and analysis team should include local representatives who may be affected by the coal seam processes.

6. According to AGL, the extracted gas from the Gloucester basin is going to be exported from Hexham in the Hunter. Why are we not keeping it for our own use here, as I understand that AGL also says that only 6% of gas is created in NSW and they must import the rest from interstate for local consumption? Don't we need the gas for electricity generation to replace coal in electricity generators? Why export the gas when AGL has to import into the state so much to meet demand? Much of the gas being extracted in Queensland is being exported too.

AGL has stated a company representative will not attend information community meetings if the press or media is present. That makes one very suspicious. What has AGL got to hide from landowners and the press?

6. In Liverpool, Lancashire, England recently there have been mini earthquakes – 2.3 and 1.5 Richter – following hydraulic fracturing processes. This process has been stopped. What is the process in NSW if there is also a mini earthquake? Who will pay the repair bill for the damaged infrastructures? And how quickly? France has reportedly banned fracturing.

7. Most wells have gas flare stacks which are important safety devices. On days declared by the government to be high bushfire risks and there is to be no lighting of fires in the open, what happens to the safety operation of the flares? Is the well shutdown for the day? As a landholder, I am not permitted to have a naked flame in the open and so that should also apply to the extraction company. As there are hundreds of wells planned, I do not know how companies can run around the region and safely shut down each one until the bushfire risk is past. What happens if a bushfire sweeps over the infrastructure? Would agricultural farmlands be more at risk by the presence of the open flame flare? In such a situation, can there be an explosion?

8. Our farm operates as a biodynamic farm in which no chemicals are permitted to be used. Certified organic farms, likewise, are not permitted to use any chemicals or unapproved inputs. Will our farm be placed into jeopardy by any chemical spill, leakage from ponds and the like? Food security and sovereignty are important issues that the government must address and having the presence of wells present seems to be counter these aspects. For our farm, if we have to have any wells on the land, all vehicles entering the drilling and well sites must be hosed down and decontaminated. Where will the water come from? What will happen to the waste water? We do not drive our road vehicles over our pastures and we do not see that drilling and extraction companies should be able to do so.

9. Extraction companies note that the chemicals used in the fracturing process are confidential. That means landholders are not given any MSDS (Material Safety Data Sheets) on the chemicals that may be used on their property. If there is an emergency response required by the SES, ambulance etc., then those MSDS sheets should be available to the landowner and also available adjacent to the well. The fact that companies say the chemicals being used are propriety is not acceptable. How can a Process Safety study be made when key chemical details are not known?

10. There are water wells in our region for watering stock. We read that one problem with CSG is that water tables dramatically drop. What does the government plan to do to provide replacement water that does not cost more than the current licence to landholders? Mid Coast Water was reported to have put down a well to supplement town water for Tuncurry and Forster when dam levels fall too much. How will the water for these towns be provided when the dam level is too low and the well water level has dropped well below the installed pipe and pump?

11. Property valuations are depressed when drilling rigs are on properties or adjacent to them. How quickly will the Valuer General reduce the property value for rating purposes after a drilling rig begins operation? How will local Councils make up for the lost rating income? Our local Council, Great Taree, requires a large injection of funds to manage old wooden bridges, badly damaged sealed and unsealed roads from flooding and government restrictions on rate increases etc. Council has asked rate payers for a special levy.

Coal Seam Gas is a very important issue for the government to address for its residents and particularly its food agricultural lands.