

**Submission
No 193**

INQUIRY INTO COAL SEAM GAS

Name: Ms Sally Chapman

Date received: 4/09/2011

The water issues associated with hydraulic fracturing to extract coal seam gas are many and serious. That the fracking process requires vast amounts of water alone should raise serious concerns on the part of decision makers living on the driest habitable continent.

Following fracking, rock formations are "thousands of times more permeable" (Durand in The Montreal Gazette, 4/3/11) allowing unrecovered gas, underground water and fracking fluids to continue to rise to the surface. This process can cause irreversible harm to substrata requiring vast sums for remediation – if remediation is possible (Ibid). In Australia. The formations drilled are at much greater depths, with commensurate potential for greater substrata damage.

Faulty csg wells polluting bores, pumping toxins into underground aquifers, possible irreversible damage to the Great Artesian Basin, all were reported in a recent ABC Four Corners presentation. Saline water from csg mining is also reported to be polluting nearby waterways.

As the NSW Farmers' Association stated, "The totally inadequate regulation of fracking chemicals means we simply don't know what we are doing to our precious groundwater systems" (The Land, 2/3/11). Currently there is NO regulation for many csg chemicals and NONE of the chemicals have been properly tested (ibid). Our 'Australian' industry uses imported 'proprietary' fracking fluids without even provision of a full list of the constituents.

Gas recovery from fracked wells averages around 20%, but results in vast quantities of "produced water", an industry euphemism for wastewater laced with toxic and radioactive elements, then pumped into holding ponds where the water eventually evaporates, leaving behind the toxic residue to be dispersed through the environment (NY TIMES, 1/3/11). I have been unable to locate any industry plans for dealing with events such as a flood.

At the end of production, wells are 'sealed' with concrete, which we know will degrade over 10-30 years (Montreal Gazette, 4/3/11). What will we do then?

While clearly water issues associated with extraction of csg have not been adequately addressed. Nor have issues of toxicity, yet 'exploratory' wells have been drilled in Sydney's water catchment! A place so protected, the public is not even allowed to WALK through it!

Fracking chemicals must be trucked to thousands of wells, so the probability of road accidents, leaking valves and similar predictable events cannot be dismissed. Nor should the additional truck movements associated with, in some cases, delivery of millions of litres, mixed on-site with sand and chemicals, of water (NY Times, 1/3/11).

In addition to the concerns mentioned above, there remain many issues to be addressed. The group, "The Basin Sustainability Alliance" reports that a number of environmental impact statements may not have been considered. The Qld. Government has not yet roused itself to even determining the baseline guidelines from which the impacts of csg extraction could be assessed (Brad Cooper, Country Life, 25/2/11).

Leaked documents from the US EPA reveal that efforts to clean up the industry in the US have been thwarted for 25 years (Democracy Now, 4/3/11). The same companies are here (Halliburton, Schlisinburger, BJ Services). Csg companies operating in Australia are NOT required to provide landholders full and frank information regarding their intentions. They have NO obligation to contact individual landholders. Landholders seeking compensation for damages caused by csg mining, who have

virtually NO commercial clout, must negotiate on their own with the energy giants. The landholder is NOT eligible for compensation for the contamination of his water supply, only its availability (Steve Gray, SMH, 3/3/11).

Despite this, the industry complains that it is “tightly controlled” (“AGL defends Gloucester csg project, ABC.net.au)!

The first batches of gas produced from a well are ‘flared’, venting the much-more-potent-than-CO₂- greenhouse gas methane into the atmosphere. Yet APPEA claims that it should be exempt from any eventual carbon tax!

At “COAL SEAM GAS WORLD (conference held 1-3 March in Brisbane) the stated goal of “Bringing Together Gas Producers, Government and Investors” ensures that many stakeholders are not included in discussions that will inevitably influence decisions regarding this industry. Perhaps this is why 2 ½ years after the Bligh government promised to protect prime cropping country, NO state government has put clearly defined provisions in effect. Perhaps this is why promises that leaking bores would be fixed have not been kept.

There are too many serious issues to be resolved for this industry to continue to be granted a ‘social license’ to operate. The loss of public trust in government protection is alienating good citizens. The issues are too crucial to our country’s longer term well being and without resolution, the consequences for us all could be dire.

PLEASE support a moratorium on csg exploration and mining until the issues are successfully resolved.

Yours truly,
Sally Chapman