

## Submission to

### Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development

#### Introduction

My submission relates to the 'mining'/'extraction' of coal seam gas. Coming from a family mining and engineering background, I am not responding from the angle of the process, technology or machinery and equipment as I have a high regard for human-kind's ability to discover, invent and build. However, I oppose the exploration and mining/extraction of coal seam gas, in Australia, because there can be no guarantee there will not be human failure.

I shall make reference to the extent and importance of Australia's underground water supply, and make use of the Gulf of Mexico Oil Spill disaster in 2010 as an example of human unreliability.

#### Australia's Underground Water

Unfortunately, the areas where coal seam gas is apparently most able to be gained are over or near the extensive underground water table known as the Artesian Basin. Water, of course, is a life-blood for all life forms, and with Australia being such a dry continent, underground water should remain as 'pristine' as possible. It is well known that at the moment countries like the USA, Canada and France are facing great controversies because of the pollution of their underground water coinciding with the process of 'fracking'. Studies are being undertaken to prove/disprove such connections, but with the 'coincidence' being so strong, it is right for the citizens of the areas to be deeply concerned. One reference to quote could be

***Hydraulic fracturing in the United States*** at such chapters as "Environmental and Health Effects" and "Critical Incidents" found at

[http://en.wikipedia.org/wiki/Hydraulic\\_fracturing\\_in\\_the\\_United\\_States](http://en.wikipedia.org/wiki/Hydraulic_fracturing_in_the_United_States)

Some in Australia have argued for a moratorium until a safe scientific process is formulated. Were it only that, I would be the first to agree. However, I must go further and say we still cannot take a chance with the water reserves on our dry continent, because of the human element involved.

#### The Human Element

It is impossible to guarantee both corporate and human integrity. There is no way to guarantee against decisions made at a corporate level to 'cut costs' at some stage, for example in the process of delivery, or at some stage of the manufacturing of the technical equipment, to 'maximize' profit (often spelt out as "Corporate Greed"); or by the overseers at the site for example from pressure to meet construction or production deadlines. An example still fresh in probably everyone's memory is the

gross human failure of integrity at the Gulf of Mexico Oil Spill 2010, described in "Finding of fault" which can be found at reference

***Deepwater Horizon oil spill***, Chapter 7.1

[http://en.wikipedia.org/wiki/Deepwater\\_Horizon\\_oil\\_spill](http://en.wikipedia.org/wiki/Deepwater_Horizon_oil_spill)

There was no problem with the design and specifics on the drawing board, the failure was in the human element much further along the chain of events.

### Conclusion

There should be no coal seam gas extraction in Australia because the underground water supply in the area is vulnerable to pollution, not because the technology could never be perfected, but because at any stage of the process, there is no guarantee against a human failure in integrity, for whatever reason.

### Recommendation

Australia is so rich in other resources, let them be researched and developed. Governments need to be discerning about what is allowed to be developed; and in this case, the Independent Expert Scientific Committee needs to advise the government that there is a higher-than-science moral imperative which dictates there must be no permits granted for the exploration of coal seam gas deposits, or for extracting it.

(Signed: M A Ross)