

Submission  
No 237

## INQUIRY INTO COAL SEAM GAS

**Name:** Dr Murray May

**Date received:** 06/09/2011

---

Dr Murray May

NSW Legislative Council Inquiry into Coal Seam Gas

Dear Committee member,

I believe three issues are of critical importance for the coal seam gas issue, namely leadership, foresight, and ecological literacy.

My qualifications include a Bachelor of Science with First Class Honours in Chemistry (specifically organic chemistry), and a more recent PhD in an ecological area. I have worked long term on environmental issues (including environmental health) in the federal public service and more recently in academia.

Two myths need to be addressed. The first is that ignorance is a solvable problem. For example, decades after the introduction of chlorofluorocarbons (CFCs) for use as refrigerants and propellants, it was discovered that CFCs were responsible for a large hole in the stratospheric ozone layer, with significant ecological consequences. Had bromine been used instead in these chemicals, its greater efficiency at ozone depletion would have had catastrophic consequences for ecosystems and humanity. That this did not occur was more by luck than anything else. Only in hindsight did humanity realise that it was destroying the protective ozone layer.

The second myth is that with enough knowledge and technology, we can manage planet earth. What rather needs to be managed is the seemingly voracious appetite for money, land and resources, and the lack of attention to ethics and common sense. Much more is unknown than is known, and Rumsfeld's "unknown unknowns" seems particularly apt when considering the coal seam gas juggernaut.

I am sure you will receive many submissions addressing the public health ramifications of coal seam gas operations; the chemical contamination of drinking water and aquifers, and the disruption of local communities because of noise, stress, and threats to home. The invasion of the CSG industry into rural properties is the equivalent of a home invasion in many respects. Malcolm Turnbull recently emphasised the high value of Australia's agricultural land when set against the CSG issue.

Australia already has many problematic ecological issues to address, as summarised well by ANU ecologist Professor David Lindenmayer in his book *On Borrowed Time*. For example, four of the ten problem areas he outlines in his book (together with potential solutions) include: overcommitment of natural resources in landscapes; limited institutional capacity to deal with the complexities of resource and environmental management and biodiversity conservation; repeating past mistakes in environmental management; and limited understanding of environmental management and biodiversity conservation issues. Who will address the overcommitment issues David Lindenmayer refers to? Who will address the monitoring of potential contamination of water supplies? Who will address the potential health impacts? Adding coal seam gas to the

already problematic ecological situation is like adding salt to a wound. With the effects of climate change increasing, clean water is a priority. Why endanger that valuable resource? (CSG is associated with both heavy water use, and with contamination of water supplies with persistent organic pollutants that are carcinogenic.)

Many decision and policy makers do not have an ecological mindset (and nor does the CSG industry), but rather a mindset that frames the issues in terms of resource extraction and money.

I understand that the French Parliament earlier this year banned the extraction of natural gas from shale rock deposits using the fracking technique. My belief is that similar action should be taken in NSW. Protecting farmers' health and the integrity of the landscape and aquifers so critical for human habitation and agriculture is what matters. The short-term focus on letting the CSG industry damage and disrupt the landscape should be out of the question given the ecological issues Australia already has to address now and into the future.

Attempting to have agriculture and the CSG industry co-exist in some sort of "managed" way is delusory. There are far too many risks, and ignorance abounds. It would be encouraging to think that common sense, foresight, and leadership can be applied in order to prevent additional social and ecological disruption, and to protect people's health, agricultural land and clean water supplies.

Regards

Murray May