

**Submission  
No 782**

## **INQUIRY INTO COAL SEAM GAS**

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Please accept this as my submission on the environmental, health, economic and social impacts of the Coal Seam Gas industry in NSW.

I am a 34 yr old mother living in Lismore NSW. I make this submission on behalf of myself and my son. I have many very real concerns regarding the CSG industry and welcome the opportunity to share my concerns with the General Standing Committee.

My concerns lay across all four themes presented above and I will address them accordingly.

### **Environmental impacts**

Coal seam gas mining and exploration result in obvious land degradation by clearing and toxic contamination and poses a threat to native wildlife which are sickened, killed and driven away by pollution and habitat loss. Native flora is also threatened by the introduction of weeds spread by transportation vehicles.

In areas of CSG mining the water tables are depleted by the continual extraction of large volumes of water which decreases the amount of water available for agriculture, human use, fire fighting and other industries. This impact is already being experienced by farmers in Queensland who have gas wells surrounding their property with one cattle farmer claiming his water supplies have dropped significantly since CSG mining began in his area, he now believes he only has two years water supply left (Carney 2011).

The possible and very likely contamination of natural waterways, groundwater systems and aquifers by seepage of toxic chemical, gases and dissolved salts in areas where CSG mining occurs. Once aquifers have been contaminated the water is unfit for human use or agriculture forever. Once land is contaminated by toxic waste water it becomes unusable for agriculture or pastoral production, forever. In this day and age when food security is recognised as a worldwide problem, where climate instability throughout the world has caused widespread crop loss from drought, flooding and other natural disasters this is the time to secure land and water for long term food production not destruction and degradation for economic gain.

The long term sustainability of the agriculture sector in Australia to provide the population with sustenance necessary to survive should be enough of a reason to protect the land for the needs of current and future generations. To risk the contamination of the land by CSG mining and activities instead of ensuring the growing population will have access to good fertile soil in the future is absurd.

## **Health impacts**

Doctors for the Environment Australia point to a US paper which reviews the chemicals used in CSG extraction and managed to compile a list of 944 products used containing 632 chemicals. Of these chemicals they noted 75% could affect the skin, eyes, respiratory and gastrointestinal systems, 40-50% could affect the brain and nervous systems, immune and cardiovascular systems and kidneys, over a third could affect the hormonal systems and a quarter could lead to cancer and mutations (Dr Carey. Marion, Prof Doherty. Peter et al. 2011). It should be noted that the list of investigated chemicals is not all inclusive as the industry has not to date made the list public.

Investigations in USA have shown very serious effects from the volatile compounds naturally found in coal seams which may be brought to the surface by leaks or the associated waste water. Of the compounds typically released 25% are carcinogenic, 37% affect the endocrine system, 52% affect the nervous system, 40% affect the immune system and 100% affect the respiratory system and many affect several systems when either drunk in contaminated water or inhaled (Lock the Gate Alliance Inc. 2011).

The health of people in communities in Australia where CSG extraction is present are already being adversely affected with symptoms such as bleeding from the nose and ears and serious headaches (Get Up: Action for Australia 2011). Reasons for these symptoms are as yet unknown but have only been experienced since the mining began.

Highly respected doctor Helen Redmond suggests in the Sydney Morning Herald the very real prospects of mental health consequences for communities living in gas fields, saying the 'mining process can divide previously close-knit rural communities, increasing tension and disharmony, affect local economies and threaten other industries like tourism' (Redmond. Helen, Wilkinson. Rick et al. 2011).

CGS wells and pipelines are fire and explosion hazards. Gas has been seen, photographed and videoed bubbling from leaking pipelines and from ground near extraction wells (Dr Shearman. David 2011; Fuller. Kelly 2011). More than 50% of tested wells in Queensland leak methane which has 25 times the warming effect of carbon dioxide (Parliament of Australia 2010; Lock the Gate Alliance Inc. 2011).

## **Economic impacts of Coal Seam Gas activities**

The projected economic gains from the CSG industry fail to consider the damage to agriculture, food exports, tourism, soil, water, air quality and human health and wellbeing. Not until the financial benefits from mining royalties, employment and the export of coal seam gas are offset against these will the true economic impacts of coal seam gas be known.

### **Social impacts of Coal Seam Gas activities**

An overwhelming amount of Australians have indicated their opposition to the Coal Seam Gas industry as evident by a poll in the Sydney Morning Herald of August 26 2011 (89% of respondents supporting a moratorium on CSG activities) (Redmond. Helen, Wilkinson. Rick et al. 2011).

In closing I would like to add that the technology exists for Australia to move toward to renewable technology future. A 'transition' is not necessary. The technology necessary already exists! One only need look as far as Beyond Zero Emissions 'Zero Carbon Australia Stationary Energy Plan' for a comprehensive guide on how this can be achieved. Attempts have been made by the coal seam gas industry and those who support it to convince the community that this industry is less carbon intensive than coal mining. This is simply untrue. At best the CSG would see a saving of only 30% on a newly built coal fired power station (Wright 2011). What Australia needs now is real investment in renewable technology, not investment in archaic technology which threatens to undermine our very survival and quality of life.

I am hopeful the insanity of the coal seam gas industry will be short lived as the wider community begins to understand the very serious ramifications of continuing in this absurd direction.

Thank you for this opportunity.

Yours,

Amanda King

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