Dear Sir/Madam

Re: Protecting water resources from coal seam gas and large coal developments: Senate Inquiry into the Environment Protection and Biodiversity Conservation Amendment Bill 2013 [Provisions]

I object to any new laws being passed that do not require the Environment Minister to take into account the water impacts of coal seam gas mining when assessing those projects for approval. The Minister should refuse to approve such projects if the water impacts are too great, or impose conditions to protect water resources from coal seam gas and coal mining. The key reasons for my objection are stated below.

I am concerned that CSG mining is a technologically-evolving industry whose impacts have not been independently and scientifically fully researched and remain largely unknown. This view is supported by professional organisations and academics in evidence to the NSW Upper House and Senate Inquiries into Coal Seam Gas Mining in 2011 and by subsequent research here and overseas. We have had to rely on the mining industry for much of our information when the industry has a vested interest in the outcome. In addition, impacts on groundwater and air quality have not been adequately monitored, and while the companies claim they are operating under Environmental Protection Licences, they have been allowed to self-monitor their compliance, self-investigate incidents and self-report such that we do not know what true impacts they may have had. Third party consultants and external laboratories that are engaged and paid for by the industry are not independent. Nor is any funded or cofunded research by the CSG mining industry. These lessons should have been learnt with asbestos in Australia and with 'Big Tobacco' in the USA. The National Water Commission in its Position Statement (3<sup>rd</sup> December 2010) said that impacts may emerge over a long time period. I am deeply concerned that the costs of unforeseen problems will be borne by the community and taxpayers after Coal Seam Gas and Coal mining companies are long gone from the area. This is grossly irresponsible.

Doctors for the Environment Australia claims that health impacts from CSG mining have not been assessed. Preliminary research from Queensland (e.g. by Southern Cross University in Tara) and overseas is deeply concerning, especially where fracking has been used. Mining companies claim that the use of horizontal wells in some areas will reduce the need for fracking, but it seems that the size of the proposed well clusters and any fracking of horizontal wells are both new and untested here. It will therefore be entirely experimental with unknown outcomes on health and property including the possibility of subsidence under many properties.

I am also concerned about evidence from Queensland and overseas on air quality and the cumulative impact of the mining companies' expansion into areas that already experience incidents of unacceptable levels of air pollution (ozone and fine particles) associated with respiratory problems (NSW Environmental Protection Authority).

Allowing CSG mining in areas that are not zoned for heavy industry undermines zoning controls and confidence in the planning process, and creates severe land use conflicts, economic instability and inequity. It will disrupt religious communities whose vocations have so far been protected by the zoning; it will place undue burden on small rural allotments whose capacity to cope is severely reduced by size, and it is unsightly and unsafe in urban areas with a potential escalation in CSG mining incidents and accidents associated with the more intense urban activity (traffic, people etc.), the presence of children, and potential for vandalism. The consequent impact on land and house values for existing land and home owners may be devastating. For many people the home is their largest asset and is often leveraged to support small business. Any devaluation by bank assessors may destroy livelihoods and life savings.

Any proposal that has not been adequately assessed poses unknown risks to our water supplies. Proper studies must be done to understand where the aquifers are and how they behave prior to any mining activity below or above ground. Potential impacts on Sydney Harbour, on the Sydney Water Catchment, and the impact of running gas gathering pipelines on public lands are unacceptable risks to Sydney's water, and are an abuse of public property for the benefit of private investors.

I acknowledge that my name will appear on my submission when publicly exhibited.

Yours sincerely,

Deborah Noyce