



submission
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History: This message has been replied to and forwarded.

Please find attached a submission on CSG in NSW.



Submission CSG review 260413.docx

Impacts of Coal Seam Gas on Human Health and the Environment

There is a serious problem with commenting on the impacts of Coal Seam Gas (CSG) extraction on human health and the environment in NSW. The problem has two dimensions:

1. There appears to be a dearth of quantitative, independent and peer reviewed reporting on these impacts. In other words the current review is unlikely to provide a rational resolution of political tensions.
2. That CSG operations are being expanded so quickly in NSW and Australia in general, that by the time the impacts are well documented they may well be beyond both our control and our ability to remediate. In other words, without a change in implementation we risk unquantified health and environmental risks.

It is true that the serious impacts reported for gas extraction activities in other countries are not necessarily transferable to NSW. It is also true that without transferring that experience to the NSW environment, we are left with little capacity to judge likely outcomes of local CSG operations.

The consequence of the problem is that there is very little that can be said with any “scientific” certainty regarding CSG impacts. The best that we can say is that the citizens of NSW are allowing an industrial scale operational research program into CSG extraction at numerous locations around the state.

There is a well-established principle to mitigate the potential impacts of imperfect knowledge - the *precautionary principle*. Its management complement is *adaptive management*. Paired, they mitigate risk where scientific knowledge is lacking by allowing cautious action that is geared to learning as the consequences of action become apparent.

Unfortunately, the relationship between the precautionary principle and adaptive management is currently being subverted in the development of CSG in NSW. Either the precautionary principle is being ignored altogether, or adaptive management is presented as a way to circumvent it rather than a sensible approach to balancing the lack of adequate information and the desire to permit action.

Risk is often defined as the likelihood of a negative outcome combined with the severity of the likely impacts of that outcome. The large-scale use of adaptive management as an operational adjunct to the precautionary principle is only sensible where risk is low. It is justifiable on a much smaller scale where risk is moderate. It is indefensible on almost any scale (except perhaps experimental) where risk is high.

A rational response to the two dimensions of the problem is:

1. The adoption of the precautionary principle and adaptive management approach for any CSG operation
2. The limiting of CSG activities to near experimental scale until data becomes available on the real impacts of this industry on human health and in the environment.

I would advocate this strategy in the case of CSG in NSW where the information about potential impacts is still clearly inadequate but the risks to human health and the environment are potentially high. This is not the strategy that is currently being adopted by the State Government.

Aled Hoggett