

**Submission
No 288**

INQUIRY INTO COAL SEAM GAS

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The Georges River Environmental Alliance

Submission to the Coal Seam Gas Inquiry

The Georges River Environmental Alliance is a network of concerned residents, community and environmental groups of the Georges River catchment, established in 1994, who advocate for the sustainable management of the catchment resources so as to ensure environmental quality and the quality of life of residents dependant on this. Our particular interests are the protection of water quality and quantity in the Georges River and its tributaries, for ecosystem health, the maintenance of biodiversity, human uses and aesthetics.

Please consider our comments in reference to the terms of reference as set out below;

1. Terms of Reference One.

CSG mining on the Woronora Plateau will affect both the headwaters of the Georges River, particularly in the Dharawal State Conservation Area and Nature Reserves, and the drinking water catchment that supplies the Woronora Dam. The Woronora River is both a significant tributary of the Georges River, and the source of drinking water for southern Sydney, notably the Sutherland Shire. The value of irreplaceable drinking water should be placed above that of an energy source, where alternatives are available.

Downstream the Georges River supports the recreational aspirations of more than a million people, and the real estate values of the housing stock surrounding it. Therefore maintaining the quality of headwater flows, apart from supporting intrinsic ecological values, supports the maintenance of a valuable community asset.

CSG technology is novel, and its threats yet to be fully realized. Therefore it is important that the precautionary principle be invoked. The onus of proof should be on its proponents to demonstrate that it does not do harm to water resources, in this particular landscape, before any widespread acceptance of this technology proceeds.

It is entirely unacceptable that Apex Energy has planning permission for 16 exploratory drill holes in the Illawarra currently, when permission instead, invoking the precautionary principle, should have been for just one or two at a time, (if at all) with further incremental approvals contingent on the demonstration of no or insignificant harm incurred on the basis of previous ones.

The Dharawal reserves, headwaters of the Georges River and the adjoining Woronora drinking water catchment are of known ecological, natural area value. The Environmental Assessment of the Bulli Seam Operation (BHP Billiton 2009), a Longwall Coal mining Project, admitted its project area, inclusive of Dharawal and the Woronora catchment contained 17 endangered fauna species. The O'Hares Creek catchment, (Dharawal), is listed on the Directory of Important Australian Wetlands. These values are highly water and shallow aquifer dependent. BHP Billiton withdrew its application to longwall mine in this area, a tacit admission that it had failed to convince both the community and the Planning and Assessment Commission that it could do so safely. The level of risk to upland swamps and watercourses was too great.

CSG technology is known to have negative impacts on water resources.

<http://www.smh.com.au/environment/fracking-can-release-cancer-chemicals-experts-warn-20110718-1hkuk.html>

<http://www.smh.com.au/opinion/the-question/is-coal-seam--gas-worth--the-risk-20110819-1j20j.html>

It can draw down and contaminate groundwater aquifers. Surface water can be contaminated with CSG waste water (which at best is brine, and at worst contaminated with highly toxic fracking chemicals). CSG requires large quantities of water for drilling and fracking in this instance, in an area, where water resources are already allocated to full capacity, for either drinking water or essential ecological flows.

CSG presents an unacceptable level of risk to this area of high conservation area. It is proposed by the current government that this area should be declared a National Park, and this is further reason for requesting a moratorium on CSG in this area. The location of CSG wells requires an unacceptable level of surface disturbance and the clearance of ecologically sensitive vegetation communities.

2. Terms of Reference Two

CSG drilling has undesirable social impacts with its proposed industrialization of this natural and scenic area, and the placement of wells close to homes and properties producing food eg the Darkes Forest rural residential community and orcharding area.

3. Terms of Reference Three

CSG is an inferior long term option for the meeting of energy needs. We advocate the immediate pursuit of cleaner energy options.

4. Terms of Reference Four

The exemption of CSG projects from important Environmental Statutes (eg Native Vegetation Act 2003, the Water Management Act 2000) is most inappropriate.

5. Conclusion

We believe that the current guiding policies for both longwall coal mining and CSG production of the NSW Government, and past and current assessment and management of these industries is poor. Mining D/A's, and the subsequent Environmental Assessments written as a consequence deal very poorly with Environmental Sustainability Criteria, and do not adequately address the Precautionary Principle. ESD principles should provide the lynch-pin for any Mining or CSG exploitation Policy and activity.

Furthermore, in the Southern Coalfield, in a submission response (2009, p4) to the Environmental Assessment for the Bulli Seam Operation, the NSW Office of Water said "The surface water systems in the Project (on the Woronora Plateau) area have reached their respective sustainable extraction limits". CSG threatens the replenishment of surface water, by threatening the aquifers that feed streams. Further the process has an unacceptably high demand for water, and produces unacceptable quantities of waste water.

Over all the public are poorly informed about the possible eventual reach and impacts of the CSG industry. There is a lack of impartial, clear and concise information that is layperson friendly about CSG projects and their environmental impacts. It is unfair that the CSG industry has the resources to promote persuasive advertising campaigns, without the countering arguments being aired. There should be a role in this mix for publicly funded science, translated into layperson friendly arguments about the take-up of new technologies.

There are strong gas industry growth pressures. This creates an urgent need to place the responsibility on the industry to develop technologies to 'avoid harm' to the environment as the priority. Avoidance of harm is the preferred option to mitigation, remediation or off-sets.

We do not accept the arguments that the CSG industry is the necessary intermediate energy source. Instead we advocate the by-passing of this option in favour of the pursuit of cleaner energy sources (eg solar, wind and geo-thermal).

Sharyn Cullis

Secretary, Georges River Environmental Alliance. 6/9/11.