

From: Aro Arakel
Sent: Wednesday, 10 August 2011 2:41 PM
To: Heffernan, Bill (Senator)

Subject: Brine Management in Coal Seam Gas Industry

Dear Senator Heffernan,

Because of my personal interest and business involvement with salinity, saline effluent discharge issues and sustainable management of industrial brines I have been closely following the media coverage of the Senate Inquiry into the Coal Seam Gas (CSG) Industry.

I refer to the article in the Courier Mail (10 August 2011) entitled "Farm gates no barrier for coal seam gas companies" and specifically to the statement made that "There's no solution for the brine". I am very concerned that this is an overstatement and not based on facts and figures. In fact there are several technology-based solutions that have been tested in Australia and overseas providing positive economic and environmental outcomes that can be potentially applied for the mutual benefit of CSG developers, Community and the environment alike.

I agree that brine is an untold story (http://www.geo-processors.com/_downloads/GEO%20AA%20CSG%20Brine%20Management%20240611.pdf) but based on my experience in the field (i.e., see the attached report, in press) I feel it is largely up to the State and Commonwealth Governments' planning processes to encourage the CSG developers to seek technology based solutions as part of their efforts for establishing best brine management strategies. This acute shortcoming is well reflected in the little or no reference to brine management in the environmental impact statements of the CSG developers. The statement in the Courier Mail that there is no solution for brine is certainly not helpful.

I think that planning for a brine management strategy should commence in earnest to form an integral part of the process of defining and implementing a sustainable, long-term water management plan. I also think that the Commonwealth Government should actively participate in generating an appropriate knowledge base to ensure that this information is publicly available. It is every right of the communities impacted by CSG developments to feel comfortable with the steps taken towards establishing best management practices in relation to water and industrial brine management in Australia.

I also believe there is an overwhelming need for updating the State/Commonwealth planning processes and policy options for brine management not only for the CSG industry but several other brine generating industries including but not limited to coal mining, coal power generation and mining/mineral processing. These policy options should encourage (if necessary through legislation) industry to actively seek technology-based solutions. As suggested earlier, these industries can be supported by government investment in R&D to find appropriate salinity solutions rather than allowing resources developers to buy time and thus increase the risks associated with brine storage for future generations.

In conclusion, I strongly believe that the farming and CSG industries can co-exist provided that future actions and decisions at both industry and government levels are based on facts. I will make further

observations and provide recommendations in a submission to the forthcoming Inquiry into Coal Seam Gas by the NSW Legislative Council.

Yours Sincerely,

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Director and Chief Technologist

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Development of a Knowledge Base on Desalination Concentrate and Salt Management

Revised Draft Final Report

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