

**Submission
No 474**

INQUIRY INTO COAL SEAM GAS

Name: Mr Jorge Tlaskal

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Dear Sir/Madam,

Attached is a short submission concerning coal seam gas. I welcome the opportunity to provide some public comments. A wide and open discussion of our future energy needs is probably long overdue.

Our family has already experienced CSG exploratory drilling 25 m from our back fence and this convinced me that this industry should be excluded from the residential areas. I have worked in alternative fuel research and in coal mining since 1975 and feel that I have a good grasp of the problems in the energy policy areas.

Best regards,
Jorge Tlaskal

Summary

Title: Coal Seam Gas – A Wrong Solution

This submission discusses the current state of the coal seam gas industry in Australia and proposes establishment of a new statutory system for accounting of quantities of water and fracking chemicals related to individual gas wells.

Coal Seam Gas – A Wrong Solution

Sunday, 4 September, 2011.

“For every complex problem there is one solution which is simple, neat and wrong.”

H.L. Mencken, a famous American journalist.

Henry Louise Menken was not wrong. The nature and the society we live in are complex but people are not equipped to handle complexity well. There is little doubt that we are facing a massive future energy supply problem. For over two hundred years we have built our prosperity on cheap and abundant fossil fuels. Now we have reached the stage that the high quality fuels such as oil and conventional natural gas are getting hard to find. Even if this was not so there are limits of how much carbon dioxide, generated by burning fossil fuels we can actually release into the atmosphere without catastrophic consequences. There are solutions but they are neither simple nor cheap. If we want to survive we will have reorganize our systems from the ground up and start treating the Earth as a garden and not as a limitless quarry.

Such complex solutions go very much against the human nature. No wonder that many people found the message proposed by the Big Oil & Gas, that “gas is the green, clean fuel of the future” initially very promising. Thus the great Australian coal seam methane gas rush with an enthusiastic government support started. At this point it might be useful to remind ourselves that five years ago another “simple” future energy solution called “the clean coal” was all the rage. We do not hear much about clean coal any more because it is proving technically very difficult if not impossible to achieve.

The promise of the “business as usual” promoted by the budding CSG industry was very attractive to many people. This did not last long. Soon the residents of the rural areas, that became the “ground zero” of petroleum exploration leases (PELs), started to realise that the current environmental legislation does provide little protection for their health, homes and land and that it is distinctly skewed in favor of the gas companies. Even worse, technical and media report from unconventional (such as the US coal bed methane and shale gas) gas ventures overseas demonstrated serious environmental, social and health downsides of these industries. This is supported by numerous literature reviews and newspaper articles, including ours (Concerns About Coal Seam Gas Industry. http://huntervalleyprotectionalliance.com/hvpa_concerns.html) that are too numerous to mention here. Most country people soon realised that coal seam gas offers nothing positive to them. The latest Sydney Morning Herald poll <http://www.smh.com.au/environment/big-support-to-stop-coal-seam-gas-mining-while-impact-is-assessed-20110825-1jcj6.html> revealed that 68% of NSW citizens oppose coal seam gas industry in the present form and want a moratorium until more research is done. The number of local citizens groups opposing CSG and united in Australia-wide Lock the Gate Alliance is now exceeding ninety!

The coal seam gas industry, because of their arrogance, failed to recognise that they have a problem. They failed to earn a social license to operate and now they are looking for solutions. Typically, they did not start to answer the many difficult questions that the local citizens keep asking them. They did not start a genuine dialog with the local landholders. No, they started an expensive publicity campaign instead. Take the [We Want CSG](http://wewantcsg.com.au/) (<http://wewantcsg.com.au/>) website. It presents many pretty pictures and many unsupported claims about the benefits of the CSG. Some might even be true but there are no links to supporting documents from some independent research. Are we supposed to take these assertions on trust? Are we supposed to trust the un-supported word from people who are benefiting financially from the gas rush?

One of the biggest public relation problems for the CSG industry is the hydraulic fracturing of the coal seams or fracking for short. Most people feel uncomfortable when they learn that the CSG industry pumps large quantities of various, often toxic chemicals into the coal seams. Some of the fracking fluids are proprietary and their chemistry is secret. The industry says either than they do not frack or that they are using only harmless chemicals used otherwise as food additives or in cosmetics. They have now a list of such chemical at the APPEA website (http://www.appea.com.au/images/stories/mb_files/APPEA_fracking_chemicals.pdf). Unfortunately, this is not going to put the controversy about the toxic fracking chemicals at the rest because APPEA’s list has no regulatory function. APPEA is only a public relation arm of the CSG industry. Individual companies are not bound to use only the chemicals on the APPEA’s list. They are self-regulating and they can frack or not frack with what ever chemical they see fit. There are no publicly available reports about such operations in individual gas wells either. Thus the public anxiety remains.

What can be done in this area?

We can start with acknowledgement that there may be some place for the coal seam gas industry for domestic purposes as long as it does not encroach on the residential areas, agriculture and on valuable nature reserves. I am not so sure that basing the energy future of this country on export of liquefied natural gas (LNG) is the right choice. Given that we may be past the peak oil already, it may turn out that production of synthetic automotive fuels from coal or even better from products of the underground coal gasification (UCG) may turn out to be more important. Similarly, we should probably also not exclude the nuclear power from the future energy mix for reasons of simple political expediency.

As far as I can see the only solution to public concerns about hydraulic fracturing is a complete transparency of the CSG industry activities – the self-regulation must go. Gas industry must take a complete responsibility for any environmental or social damage they cause. Even better, they should re-design their operations using the precautionary principles and not to take any environmental risks at all. Our politicians and public servants can do us a great service by instigating a complete overhaul of the whole coal seam gas legislation. They should introduce some kind of statutory accounting for water, chemicals and air pollutants associated with the coal seam methane gas industry along the following lines:

(1) Every liter of fresh water that goes into gas wells and every liter of waste water that comes out of gas wells should be recorded. The chemical composition of all CSG water should be constantly monitored and the records must show how much of the salt and /or other toxic compounds has been brought to the surface and how they have been disposed off. This should include quantities and prices of water purchased from outside or obtained from registered water wells or surface water sources. Statutory records for each well should be made publicly available on the internet.

(2) All chemicals used in drilling and fracking fluids in each and every borehole should be recorded, accounted for and published. Proprietary compounds of unknown chemical composition should be illegal to use.

(3) Data, results and reports of all scientific environmental studies dealing with water, chemicals, underground geology and toxic air emissions from whatever source should be regarded as a public property and published on the internet without delay.

(4) All records collected under (1, 2, and 3) must clearly show the line of personal responsibility e.g. the name of the person who approved the work, who designed the fracking fluid and when did the actual work take place. These records should be archived in perpetuity so that the responsibility for any environmental damage discovered later could be properly allocated. This would make everyone concerned think twice before cutting corners!

(5) Representatives of the local community and government inspectors must be, upon request, allowed to inspect all gas mining installations, examine the statutory records, and take photographs or water samples. Reports of such inspections should be published

immediately upon completion.

(6) Government authorities should device a system of environmental bonds to cover full rehabilitation of the gasfields at the end of gas mining projects.

(7) Gas companies, that obtained the original gas production license, should be responsible for any environmental regeneration work for the whole life of the CSG project. For example, during the life of a project it should be made illegal to transfer the ownership of the production mining lease to another company structure that has no financial means to complete all outstanding regeneration work.

(8) Gas companies should be made ultimately responsible for any financial losses in property values in the area they operate in. This should include the situations when a particular landholder may not be able to sell their property because nobody is interested to move into an existing or future gasfield. Potential erosion of the property values may be the most troublesome problem for the CSG industry yet because real estate market forces are beyond anyone's control (see “CSG ripples felt in rural property” <http://qcl.farmonline.com.au/news/state/agribusiness-and-general/general/csg-ripples-felt-in-rural-property/2085883.aspx?storypage=0>). It should be noted that the coal mining industry, because of its much smaller land footprint, is able to solve this problem successfully by purchasing neighboring properties at pre-production prices.

(9) The current 200 meter buffer distance of CSG installations from principal residences, stipulated in Petroleum (Onshore) Act 1991, should be revised significantly upwards. The present legislation does not even say if this distance is measured from the well head or from the extraction boundary. This statutory buffer is completely meaningless when the fracking zone of a vertical gaswell extends as far as 400m or as far as several kilometers for horizontal wells.

(10) There should not be any drilling what-so-ever under residential properties or under rivers and streams.

I am aware that these radical proposals will not meet with the approval of the CSG industry. They will see them as unnecessary additional burden and red tape. However, I feel that fresh water, clean air, healthy land, wholesome food and thriving rural communities are far more important than easy life for the gas companies. They spend a lot of money to publicise how environmentally responsible their gas mining operations are. If they are so sure about their facts, they should welcome the opportunity to publish all relevant data and account for all the water and for all toxic chemicals in a transparent manner. They will have nothing to lose! They should also not mind lodging environmental bonds big enough to cover all potential damage to the land, water, air and communities that they operations may cause. After all, most people believe that the industry is there to serve the mankind and not the other way around!

DISCLAIMER

The author of this submission is a member of the Hunter Valley Protection Alliance (HVPA). However, all ideas and proposals presented in this submission are entirely his own and do not represent the official view of the HVPA.