

**Submission**

**No 409**

## **INQUIRY INTO COAL SEAM GAS**

**Name:** Ms Natasha Watson

**Date received:** 14/09/2011

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## **Att: Coal Seam Gas Inquiry NSW**

Please accept my submission to the General Purpose Standing Committee No. 5 Inquiry into Coal Seam Gas Mining (**CSG**) in NSW to register my concern over CSG mining in NSW and especially the permission granted to APEX Energy

to explore for coal seam gas in the Sydney Water Catchment - special areas and state conservations areas of the northern Illawarra PELs 442 & 444

Coal seam gas mining poses substantial risks to the environment and residents, both in short term and worse long term ramifications. The methods of exploration and commercial extraction are still relatively new in Australia, but the industry has grown rapidly and exponentially in the past decade, with huge foreign investment that far exceeds research in the environmental ramifications.

It is a fact that the NSW Department Primary Industries granted PELs across the state, with very few required to provide or detail Environmental Impact Statements. This was evident in the September 2010 parliamentary FOI enquiry by MP Cate Faehrmann. A great deal of correspondence obtained indicated a panic between the DPI, DECCW and DoP, trying to confirm what they had actually been approving in the previous seven years. Neither DECCW or DPI were even aware that AGL in Camden performed hydraulic fracturing, despite Frank Sartor and Dianne Beamer launching the AGL csg industry there in 2004.

In August 2010, whilst searching internet documents on subsidence, I stumbled upon the in-house Apex Energy plans for exploration and eventually commercial market of csg in the northern Illawarra. Document and confidential reports revealed that Apex's classification of 'community consultation' in the Illawarra was a brief presentation to 8 rural fire service people and a few residents that signed leases for access to their land. Apex Energy's plans included using hydraulic fracturing (fracking) in at least two of the proposed boreholes on Sydney Water Catchment land (AI16 and AI19). Apex Energy and their joint venture partner Ormil Energy now deny that they intend to fracc, but their own documents state that they need to.

As it stands, Apex Energy are in breach of their current PELs 442 & 444. The company directors have been publicly emphatic that they have not drilled any boreholes since the first in 2004. Yet the PELs granted required 3 new bore holes within the first two years (Nov 08-Nov10 and Sept 09 - Sept 11) plus a combined minimum spend of \$4.1million. These conditions have not been met and the Minister for Primary Industries - Katrina Hodgkinson should proceed to revoke them.

Aside from the breach of terms for PEL 442 & 444 my basis for ceasing csg exploration in the Illawarra is

### **1. CSG mining contaminates water**

- CSG mining always produces contaminated water
- Water must be drawn out of the coal seam to access the methane gas. This 'produced water' is highly saline and can contain toxic and radioactive compounds, as well as heavy metals.
- CSG mining will be a major user of water. The CSG industry states that a single well takes approximately 13 million litres of water to fracture.
- Drilling and fracking involves a large number of toxic chemicals (over 750 identified) much of which is released into the environment
- Contaminated water is generally stored in ponds near wellheads.

## **2. Hydraulic Fracturing (fracking) is a dangerous and unsuitable technology to employ**

- Hydraulic fracturing or 'fracking' is used to release CSG. It involves injecting large volumes of water, sand and toxic chemicals into the ground to fracture coal and release the methane gas
- Fracking brings contaminated water and geological disruption close to water catchments and aquifers, as well as above ground, posing unacceptable risks.
- CSG mining uses fracking to be viable and will be used in at least 80% of Australian CSG wells

## **3. CSG infrastructure has a large and damaging foot-print**

- Production fields typically require drilling well pads every 400-900 metres,
- CSG well heads are connected by networks of pipelines and roads to get plant and equipment in and wastewater and gas out, requiring extensive land clearing - heavily fragmenting the precious wildlife corridor of the northern Illawarra

## **4. CSG and the Illawarra upper escarpment of the Northern Illawarra**

- Fifteen exploration wells have been approved in PELs 442 & 444, with 140+ production wells likely . Bore Hole AI19 on Sydney Water catchment land is under assessment with the DoP (I have had over 1,000 individuals lodge submissions against this)
- 7 of the 15 are in Sydney Catchment Authority '**Special Areas**', which have restrictions on land use and access to protect our water supply, the rest about those Special Areas
- The approved wells are adjacent to upland swamps that feed and clean the adjacent water catchments, including the Georges and Woronora river systems

### **The 15 exploration wells in relation to SCA water catchment 'Special Areas'**

- Some of the 15 sites were 'high conservation' zones until 2009, protected from CSG mining

**PHOTO: The State protected Dharawal Nature Reserve in the vicinity of where CSG drilling is to occur**

- In the 2009LEP Wollongong City Council downgraded zoning against the advice the Department of Environment and Climate Change (DECC) and Sydney Catchment Authority (SCA)
- This occurred after The Department of Primary Industries (DPI) demanded in their submission to the Draft LEP that all E2 land in the Wollongong LGA be downgraded to E3 or lower to facilitate CSG mining
- As Planning Minister - Frank Sartor introduced new legislation and amendment bill to allow petroleum & gas exploration in our water catchment and state conservation areas. This bill should be amended once again to PROTECT those same areas from csg exploration /commercial extraction

I call on the NSW Government to do what is right and halt the csg industry until our farmland, water catchment and conservation areas can be certain of their protection and sanctity.

Yours sincerely

Natasha Watson