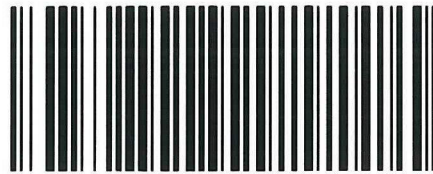
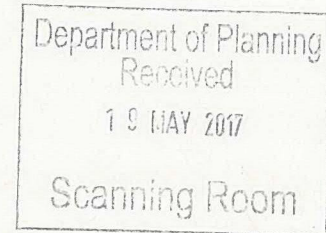


PETERSHAM NSW 2049



PCU070862

The Executive Director, Resource Assessments  
Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001



18 May 2017

Dear Sir/Madam

**SUBMISSION: Narrabri Coal Seam Gas (CSG) Project, Pilliga Forest area - Environmental Impact Statement (SSD 6456)**

**Introduction**

I am a member of Stop CSG Sydney. I have been involved in this group since 2011 when a CSG exploration company (Arrow, then Dart) applied to explore for CSG in St Peters, a heavily built up inner western suburb of Sydney some three kilometres from my home. The Company did not proceed with its attempts due to overwhelming opposition by local councils and Sydney residents. I was also involved in this group's campaign to have the exploration licence over this area (and much of the Sydney basin) revoked, which it was in 2015.

My general interest in, and opposition to, coal seam gas mining has remained because of its negative impacts on the environment and communities.

I am aware that Santos proposes up to 850 wells on 425 well pads over 95,000 hectares in north-western NSW - more than four times the size of either of the previously approved CSG projects in NSW for the above project. I hold grave concerns for the overall impact of this project on the entire area - environmentally and socially - and believe that if it is allowed to proceed, it will contribute ever greater threats to the biological integrity and safety of the area.

**I OBJECT TO THIS ENTIRE PROPOSAL.** My reasons are as follows:

- 1. The EIS** submitted by Santos is short on detail. For example, it does not provide maps indicating where the 850 wells, lines and infrastructure between them will actually be situated. Thus the overall potential impact of this proposed industrial imposition is far too vague.
- 2. The justification (economic or other) for this expansion is not provided**  
Given the known harms that have occurred from existing gas fields in Queensland, why is the NSW Government even considering a project of this enormous scale in an area that supports precious, complex native plant and animal habitat as well as much-needed agricultural land.

Time and again, the wider community is spun the lie that Australia has a shortage of gas, hence the need to mine for CSG. However, by now it is well known that



Australia produces more than enough LNG to supply Australian needs but the "shortage" is created because we are exporting gas to countries that will pay higher prices than can be gained in Australia.<sup>1</sup>

While the Federal Government's current plan to quarantine or reserve a certain proportion of otherwise exportable gas may help tide businesses over in the short term, that plan should indeed be relatively short term until far more resources are poured into investigating the viability of establishing greater numbers of renewable energy plants throughout Australia, especially regional areas.

### **3. Extraction of salt**

Along with "produced" water, over 430,000 tonnes of salt brines (a waste by-product of its water treatment) are expected to be produced during the life of this project.

While the NSW General Manager of Energy at Santos has claimed that much of the salt brine will be reused in industrial areas from sodium bicarbonate production to paint manufacturer, the EIS also proposes the possibility of disposal in yet-to-be specified landfill sites. Why are the landfill areas not specified? And if granted, who would undertake to monitor the salt deposits in those landfills and their proximity to water tables, native vegetation areas and so on? What would be the guarantee that the salt in landfill sites did not leach out of the ground into groundwater, thus creating grave risks for agricultural landholders and the general environment?

### **4. Biodiversity and the Pilliga Forest**

The Pilliga is the largest temperate woodland in NSW. Santos proposes to clear nearly 1,000 hectares of this forest, which includes habitat for endangered species such as the *Regent Honeyeater*, the *Pilliga Mouse* and koalas. Fragmentation and degradation of this already challenged area will only lead to further decline. Moreover, Santos' claims that it will regenerate areas after gas extraction is complete are spurious. The "it'll grow back" mantra so often used by destroyers of ancient and complex habitats shows little regard for the evidence that natural areas impacted on by CSG mining do not bounce back. Since 2014, local landowners near the Pilliga Forest have observed the lack of recovery of trees and groundcover from previous chemical spills, despite assurances from Santos that stricter monitoring and investment in rehabilitation will occur in future.<sup>2</sup>

### **5. Health impacts**

Neither the NSW Government nor Santos have investigated or addressed the serious health effects of CSG extraction (for example as currently occurring near AGL's Camden wells near Sydney).

The Government must require Santos to conduct a full health impact assessment including modelling exposure pathways, reviewing literature and engaging with the Narrabri community. Furthermore, all results of such a health impact assessment

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<sup>1</sup> Greg Jericho, *The Guardian*, <https://www.theguardian.com/business/grogonomics/2017mar/21/fracking-and-coal-seam-gas-is-no-solution-to-an-energy-crisis-of-our-own-making>;

<sup>2</sup> <http://www.abc.net.au/news/2017-04-06/nsw-csg-project-sparks-fierce-debate-over-energy-future/8418102>



must be made publicly available, not partially withheld due to being "commercial in confidence".

## **6. No Social Licence to drill or mine**

Surveys conducted across the Pilliga region have shown that 96% of landowners oppose CSG. Many farmers have expressed grave fears for the health and water impacts of the CSG industry.<sup>3</sup>

## **7. Impact on groundwater/the Great Artesian Basin (GAB)**

One of my greatest concerns about the impacts of CSG mining in the proposed area is on groundwater.

In December 2014, an expert scientific panel, the Independent Expert Scientific Committee (IESC) which assesses the impacts on water supplies of proposals to drill for CSG and provides advice to governments, found in its report numerous problems with a Santos proposal to drill in over 6,000 wells in Queensland and that "the scale and geographic size of the project create[d] considerable scientific uncertainty about potential impacts on surface water and groundwater and associated ecosystems".<sup>4</sup>

This same uncertainty and risk holds true for the proposed CSG area in the Narrabri areas.

Many farmers in this same area rely wholly or partially on water supplied through the GAB and cannot risk ANY contamination to their land from chemical leakages.

## **8. Air quality**

The air quality assessment does not include health damaging fine particulate pollution of 2.5 microns diameter ("PM2.5"). With diesel generators at each well pad and at the water treatment and gas compression plants, there will be significant PM2.5 emissions.

Where is the modelling of the likely substantial escape and effects of fugitive methane emissions on the environment? Methane is a known greenhouse gas and at this time of increasing global warming contributed to by methane and other gases, modelling of likely methane emissions must be presented.

## **Summary and Conclusion**

In this age of human-induced global warming, it is unthinkable that Santos is being allowed the possibility of creating an industrial wasteland in the Pilliga Forest and surrounding areas due to the high risks to groundwater, air quality, impacts on farmers and their farming land, fracture of local communities and lack of safe disposal of salt wastes.

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<sup>3</sup> Lyndon Schneiders, 25/3/15 SMH (<http://www.smh.com.au/comment/pilliga-forest-coal-seam-gas-mining-a-misstep-20150323-1m5xbu.html>).

<sup>4</sup> Lyndon Schneiders, SMH 25/3/15: <http://www.smh.com.au/comment/pilliga-forest-coal-seam-gas-mining-a-misstep-20150323-1m5xbu.html>

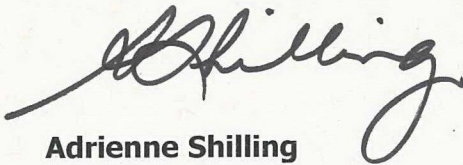
There is enough gas in existence in Australia to be accessed and used in the short term if the Federal Government chooses to quarantine sufficient quantities from the export market.

Above all, governments (state and federal) and Australian companies must look to renewable energy sources for the long term – principally solar and wind - as the next major suppliers to both domestic and industrial users, rather than continually seeking to uproot already fragile natural areas for coal seam gas for a dubious return on investment.

**I object in its entirety to Santos' proposed CSG project at Narrabri.**

**RECOMMENDATIONS:**

1. I urge you to reject Santos' application completely.
2. That Santos – or a different company/companies altogether – investigate the viability of establishing more solar farms in the Narrabri and Gunnedah areas.

A handwritten signature in black ink, appearing to read 'A Shilling', with a stylized, cursive script.

**Adrienne Shilling**