Mark Radford 20 New Line Rd 2125 18/4/2017

NSW Department of Planning and the Environment

Dear Sir or Madam,

I am writing you to today as both a lifelong NSW resident and a vehement protester against the plans for coal seam gas expansion in the Pilliga. The citizens of NSW have said no time and again to CSG, and the prospect of allowing a company the likes of Santos to encroach on such a precious and irreplaceable ecosystem is horrendously distressing.

In the relatively short period in which CSG exploration has been underway in the Pilliga, there have already been considerable negative environmental outcomes. In February 2014, an array of dangerous heavy metals, salts and petrochemicals were leaked into an aquifer, despite Santos general manager for energy Peter Mitchell's claim on aquifer contamination that there was an "infinitesimally small chance that that can happen." In June 2011, 10,000 litres of wastewater were spilled, killing a wide array of flora and fauna and damaging soil over hectares of affected forest. It is important to note that this spill was not even acted upon by Santos until 2 January 2012 when a local farmer reported the incident. On 26 November 2015, during a total fire ban, locals even caught them conducting open flaring at their exploration wells, a lazy and unnecessarily dangerous practice even if they weren't in an extremely dry eucalypt woodland. These are just three out of over twenty examples of Santos' environmental misdoings in the Pilliga, and Santos have admitted to keeping incomplete records, so there may well be more. Already, Santos have consistently proven themselves to be unreliable, dishonest and destructive to the environment throughout the extraction process, and the project itself hasn't even begun yet.

This project is planned to consist of 850 wells on 425 sites, covering around 1,000 hectares of a 95,000 hectare area. This means access roads, pipelines, wells, waste holding ponds, treatment facilities – all pockmarked and scarred through the forest, ripping up a once pristine and unique ecosystem into a treacherous patchwork of poison and dirt amidst the stranded pockets of struggling survivors. It is well documented that forest fragmentation has a variety of detrimental impacts on a habitat, and a big part of the reason the Pilliga is so special is that it is the largest and most intact temperate woodland in eastern Australia. Largely due to this, the Pilliga is also a noted wildlife refuge and part of one of only 15 recognised biodiversity hotspots in Australia, in the Brigalow Belt South Bioregion.

A 2011 study by the Northern Inland Council for the Environment confirmed at least 20 threatened species living in the Pilliga. The Pilliga has NSW's largest koala population west of the Great Dividing Range, and koalas are particularly sensitive to habitat destruction, with other projects such as this already playing a massive role in their plummeting numbers. The targeted areas for mining were also shown to be highly significant to the Pilliga Mouse and the South-eastern Long-eared Bat, which are both nationally vulnerable species. Fauna ecologist Phil Spark states, "It is apparent from the survey results that the eastern Pilliga provides core habitat for these two nationally threatened species and in the case of the mouse, probably represents the centre of its world distribution. Clearly, any development that destroys and fragments habitats in this area will have a major impact on their survival." To pursue further exploitation of such a vital ecosystem for gas we do not even need would be irresponsible and unscrupulous government.

The entire feasibility of the scheme has even been brought into question, with multiple factors stacked against Santos's ambitions in the Pilliga. Since initiating their transition to CSG and the global gas market in 2014,

Santos have seen their stocks plunge to well below a quarter of their former price, where they have remained for over a year. Mark Samter, Director of Oil and Gas Equity Research at Credit Suisse, recently gave the Narrabri project a 100% risk weighting, saying that "The recent environmental issues must raise some serious questions about the political challenges to commercialising that gas." Global gas prices are uncertain and will possibly drop in the wake of US and Russian gas entering the Asian market, and Santos currently do not have the resilience to deal with fluctuations, shortfalls or disruptions – even recent Santos CEO David Knox acknowledged that the company is stretched, before leaving the company amid concern over collapsing oil prices linked to their LNG contracts. The trending shift away from these oil pricing models further increases market instability, and alongside probable delays due to fierce local resistance and hurdles due to constant regulatory reforms, the Narrabri project will struggle to make returns on hefty capital expenditure, leaving investors wary. They have also conceded that their move into the export market will raise domestic prices, sparking intense lobbying to reserve a set amount of gas at a reduced rate for the local market, even further increasing doubt surrounding the project's economic viability.

Such high levels of risk and uncertainty have caused concern over this project to become widespread, but nowhere is it more pronounced than in its surrounding areas of north western NSW. An extensive doorknocking campaign throughout the region revealed a staggering 96% of those surveyed to be opposed to CSG. Being a thriving agricultural region, communities rely heavily on their water supply, much of which is groundwater based. An EPA report released May 2014 reveals that one of the aquifers already contaminated by Santos has four stock and domestic bores within 5km. Attempts to remediate the pollution have thus far proved helpless, proving just how little can be done to clean up the CSG mess once it has occurred. No project is important enough to jeopardise people's lives and livelihoods, let alone causing lasting and irreparable damage to our limited vital resources.

I regret that I have no positive suggestions or compromises to offer on this matter, but the benefits of the Pilliga scheme are so extremely limited compared to the vast array of negatives, surely the only way forward is to put a halt to Santos's follies on our precious land as quickly as possible. It is unfortunate Santos took the misguided steps down this path, but the people and ecosystems of NSW must not be made suffer for the bad decisions of any company. Please, do not let another invaluable part of our country be laid to waste. Protect the Pilliga.

Sincerely,

Mark Radford