NSW Department of Planning and Infrastructure

Submission: Expansion of Dewhurst coal seam gas exploration pilots, Narrabri gas exploration

I am writing to strenuously object to Santos proposed development.

I live on a grazing property in North West NSW with my family, and we will live the detrimental effects of this unconventional gas invasion in our family business, our environment, water, land, communities and our future; should the Government continue along this reckless path of approvals allowing mass industrialisation of the North West.

The Governments own admission by way of recent action clearly indicates the level of concern it has regarding the possible harmful effects this industry could impose on the underground water. First the Government announced a 2 km buffer zone around towns (but not individual rural homes); and a no go zone on critical industry clusters, supports there are likely to be negative and harmful effects from invasive gasfield.

On 12 November, the NSW Government announced that coal seam gas exploration activities were to be put on hold in the declared Special Areas of Sydney's drinking water catchment while a scientific study is conducted by the NSW Chief Scientist and Engineer, Professor Mary O'Kane. The then-Minister for Resources and Energy said at the time that, "Designated Special Areas in the Catchment are recognised due to their topography and importance in filtering surface waters that flow in to the catchment's dams. No activities should occur in these areas if they are detrimental to the quality and supply of water to the large population of Sydney and the Illawarra."

The Pilliga sandstone is a recharge aquifer of the Great Artesian Basin, the largest water resource on the continent. It supports rural communities, industries and environmental services in several states. This resource is as precious to Australia's society, environment and economy as Sydney's drinking water, and should be immediately afforded the same protection.

We are calling on the Government to adopt the precautionary approach to protecting water from unconventional gas exploration and extraction, especially in rural areas where underground water is the life blood of thousands of families and their businesses.

The 'triple stacked' drilling of horizontal coal seam gas wells through the casing of the existing wells, at Dewhurst 13-18H and 31 poses great danger to the Great Artesian Basin and other aquifers as it is very difficult, if not impossible, to seal the junction between the casing and the lateral drilling. Professor Mary O'Kane has said that she had been told by Santos that they had difficulty sealing these junctions known as Kick Off Points (KOPs). The contamination of this Great Artesian Basin

recharge aquifer would have profound implications for NSW and the pollution of aquifers by either drill fluids or gas escapes and the down draining of aquifers must not be risked.

I have major concerns for the operation of Dewhurst 13-18H and Dewhurst 26-31 pilots over three years. Drilling these wells will produce an additional 331 and 413 ML respectively, of saline water containing heavy-metals and petrochemicals. Santos still does not have approval for the long-term sustainable management of this toxic produced water. Therefore it is not justifiable for the NSW government to give approval to further expansion of their exploration program without a plan for this fundamental aspect of the operation, nor any details on how they will deal with the massive volumes of toxic crystalline solution that remains. These pilot wells, should they be approved, are expected to produce 5 tonnes of salt per day, and their projected operations in the North West to produce 150 tonnes of salt per day. Failure to provide an adequate management framework for produced water poses a huge threat to the local creeks and groundwater from spills, and a massive threat to the local agricultural industries.

It is obvious that Santos' approach to have a limited number of wells approved under one application is not the true intent of their entire interest in our region. Santos' original information to shareholders trying to sell their project was for over 1000 wells in the Pilliga, but their application before the Federal Government's EPBC 'water trigger' was reduced to 18 pilot wells, removing their 50 core well application to eliminate activating the 'water trigger'. It is time the Government assessed this based on the cumulative impact this industry will impose on our region, not just individual smaller applications, one at a time, as it is clear Santos are 'playing' the system.

Also, the NSW Government is currently taking legal action against the proponent of this project for a spill of untreated produced water from Santos' Bibblewindi Treatment Works facility in the Narrabri gas project in June 2011. It took a local landholder to raise the alert as Santos simply overlooked this very serious issue and failed in their duty to report it to the Government. Santos has pleaded guilty to the charges brought against them and it is completely unacceptable for any further approvals to be granted for exploration in the Pilliga while a long-term solution to the safe and ecologically sustainable management of produced water is not available.

I have recently inspected Santos activity in the Pilliga and was alarmed to find many breaches in their approach and will be lodging formal complaints. The lack of governmental inspectors on the ground to enforce the compliance issues for licences is unacceptable and leaving Santos to report any breaches is simply leaving the fox in charge of the hen house. Rural communities will not tolerate this blatant neglect and unreasonable exposure to harm. It is the Governments duty to protect, and they are already failing in that role. Therefore, how could more unmonitored wells be safe for our region.

In Santos' submission to the Bibblewindi pilot project extension last month, the Office of Water stated that "insufficient information has been provided for the Office of Water to assess the validity of the model and its suitability in making the required predictions" and called for the peer review of the model to be released. The Office of Water also complained that "No reference could be found to

any detailed groundwater quality information" in the EIS and that the requirements of the Aquifer Interference Policy had not been fulfilled in this regard. Both of these requests are yet to be fulfilled, and yet the proponent is seeking comment and approval for further exploration activities. It is inappropriate for Santos to be seeking a further expansion of the Narrabri gas project while questions remain unanswered about the activities already underway and proposed there.

I cannot accept that the Aboriginal cultural heritage requirements were taken out of the Director General Requirements for this project. The Gomeroi Traditional Owners of the Pilliga Forest have an ongoing connection to the Pilliga Forest through 'song-lines', sacred sites, bush-medicine and cultural practices. The rights of the Gomeroi Nation to have their traditional knowledge and spiritual practises considered as part of this Planning proposal, has been denied. Their heritage and ongoing cultural ties to the forest should be protected from damage and degradation caused by this project.

Recently, local Rural Fire Service volunteers also inspected Santos' activities and were very concerned at heightened fire risks caused by Santos' operations. There is a lack of a clear bushfire hazard avoidance and emergency strategy for this project. The current Pilot Production well site has not been inspected and signed off by the RFS causing serious concerns to local community members from adjoining districts. The Pilliga is highly susceptible to fires, largely due to the high incidence of ironstone attracting lightning strikes. It is not unusual for the Rural Fire Service to record up to 1000 over a 24 hour period in the Pilliga region.

I am also alarmed that Santos requested the closure of the State Forest, which has been enforced by the Forestry Corporation. The local fire trails within the Pilliga East State Forest have recently been closed due to Santos activities. This poses more danger and risks to locals and these public places should not be denied whilst Santos transform them from bushland to industrialised gasfields.

In addition to those points, I want to add something I feel is the most important issue. Santos does **not** have a social licence to operate in the North West. I know personally as I have worked with individual communities right across our region and there is overwhelming support, with over 96% of all communities over an area of 1.2 million hectares so far, declaring to protect our communities from the invasion of industrial gasfields. Therefore, the Government will be turning their back on thousands of hard working, decent, Australians whose genuine wishes to remain Gasfield Free, should they choose to grant approval for this project to proceed.

With all those points I have raise, I ask that the Government reject Santos' inappropriate proposal.

Yours sincerely

Megan Kuhn "Makiwa" 568 Pandora Pass Road Bundella NSW 2343

9 December, 2013