This is a submission to the Santos Narrabri Gas EIS. I object to this project and recommend that it be rejected.

I am from Attunga NSW and voluntarily manage two Voluntary Conservation Agreement areas near Tamworth covering 2,742ha. The Santos Narrabri Gas project is not in keeping with sound environmental management.

Santos' project is expected to remove over 37 GL of groundwater over the life of the gasfield with the greatest loss in the first years. The aquifer beneath the Pilliga Sandstone is part of the Great Artesian Basin recharge and the project will result in the drawdown of the GAB. That is not acceptable. The coal seam needs to be dewatered to release the gas but the water produced has been in contact with coal beds for millions of years and has absorbed contaminants such as methane, benzene, toluene, xylene, ethyl benzene and can contain heavy metals such as uranium, cadmium and lead. Already with just a few wells there have been spills of contaminated water. Multiply that by 850 proposed wells and it becomes a major disaster which cannot be rehabilitated. The water below the ground contains dissolved salts which must be removed by reverse osmosis, a process that requires huge amounts of energy. Santos proposes to use extracted gas as the energy source but will not pay royalties for this energy or for gas that leaks on site. In fact this project is not a money making venture in costs to community. Research undertaken by AGL shows the gas from the Pilliga would be the most expensive gas of anywhere in in the current east coast gas market. Of the 150 direct jobs, most of these will be specialist workers who do not live in the area. Job losses are likely as both the internationally important Siding Springs Observatory and the Dark Sky Park which attract tourists will be impacted and potentially shut down by light pollution from onsite work using strong lighting required by WH&S. Flaring will also contribute to light pollution. Landholders face reduction in land value and inability to get insurance against damage caused by the industry.

Environmentally this project is a disaster. Peak salt production will be 115 tonnes per day and 41,900 tonnes of salt annually that needs to be put into landfill. This is not just saline soil. This is a permanent disaster area on which nothing can grow. The Pilliga is the largest temperate woodland in New South Wales. It relies on ground water which Santos Narrabri Gas project will remove. Santos proposes to clear almost 1000ha of the Pilliga. This is habitat for the critically endangered Regent honeyeater and for koalas which are already in declining numbers. It will clear habitat of the Pilliga Mouse which is only found in the Pilliga. It will fragment and degrade the forest. This is a natural icon of our area which has been a place I have gone to camp and enjoy. I will be excluded if this Gas project goes ahead. This is an Aboriginal Cultural place. The gas project will take the stories from this country forever. Removing artefacts does not preserve cultural values and stories. The land needs to stay healthy and intact.

Santos' EIS does not provide maps indicating where the 850 wells and the lines and infrastructure that run between and around them will go. No project has ever been assessed this way before in NSW and the constraints Santos proposes are weak and subject to change. The public needs the details before this project can be appropriately considered. At the moment the Narrabri Gas Project does not have social/community acceptance. There are public health risks, air quality risks and climate change risks that are too great. People and animals in proximity to the gas wells can expect an increase in illness, birth defects and decrease in birth weight with chemical exposure causing nausea, vomiting, nose bleeds, rashes, eye throat and skin irritations. Animals exposed to the produced water could die judging from reports from Queensland and the United States. Over a 20 year period methane is 86 times worse than CO2 as a greenhouse gas. Over a 100 year time frame methane is 34 times worse than CO2. Even small leakages are significant. Methane as I understand is purposefully vented and leaked during drilling, in drill fluid, at leaking wells, during gas production and during transmission, storage and distribution.

The Pilliga is a naturally fire prone area. As a member of our local Brigade, I personally would have to refuse to attend a fire in the Pilliga if the Santos Narrabri Coal Seam Gas Project went ahead. The site would be too dangerous. A fire will occur.

In conclusion, I strongly object to this project and recommend that it be rejected.

Kate McLaren Attunga NSW 2345