Executive Director Resource Assessments Dept of Planning and Environment GPO Box 39 Sydney NSW 2001

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Submission (Objection): Narrabri Gas Project EIS (SANTOS)

I strongly object to the Narrabri Gas Project (in the Pilliga Forest ecosystem, an important Recharge Zone for the precious Great Artesian Basin). The Project is financially unviable and must not be allowed to waste taxpayers' and investors' resources.

We must value precious water in the environment, and not let it be depleted unnecessarily by fracking / gas exploration processes.

If approved, the NGP would blatantly:

a) Extract over **35 billion litres** of salt laden groundwater, much of it in the first <u>five years</u>. This water will be treated and will generate almost **500,000 tonnes of salt waste**, for which there is no safe disposal plan.

b) Clear close to 1,000 hectares of the Pilliga Forest, fragmenting the <u>largest temperate woodland in New South Wales</u>, home to unique wildlife.
c) Drill through a <u>recharge aquifer of the Great Artesian Basin</u> and draw water down from a water resource relied upon by rural communities across western NSW.

d) Lead to large deliberate <u>emissions of methane</u> from venting and leakage, **adding to climate change**.

There are <u>multiple reasons</u> why the project should not go ahead and the Santos EIS be rejected outright:

1. Lack of Detail.

SANTOS' EIS, though long, provides little detail about methodologies used (i.e. waste / remediation) or actual site specifics for the 850 proposed well heads and associated planned infrastructure.

At this stage of the development process this is entirely unacceptable and risky to all concerned. The Field Development Planning mechanism is an absolute excuse to allow Santos to do what they like when they like without due consideration. We cannot trust them to develop their plan 'in the field', as their prior record of spills and leaks are outstanding.

For their EIS to be approved, surely SANTOS must be transparent in all operational aspects. If these unspecific plans are approved, there is a

probable likelihood that unplanned risks will be greater, and this is definitely not in the interests of the broader community, shareholders, or government agencies.

2. Unsafe Waste Water Disposal / Water resource depletion and Depressurisation of Recharge Aquifers.

SANTOS plans to divert and use billions of litres of water, create highly toxic waste 'produced' water, to be 'treated' and disposed of (via crop irrigation), with tens of thousands of tonnes of toxic salt generated as a waste byproduct. Their completely unsustainable use of critical water resources in a borderline semi-arid region and important recharge zone is mind boggling, and, in my humble opinion, guite insane. Let alone the serious impact this will have on Narrabri/Namoi/ Gwydir and neighbouring regions water table levels from aguifer depressurisation. The over-extraction of water, (and the fracking process) will cause aguifer drawdown and cross contamination, eventually depressurising essential domestic and farm water supply bores and drying them up, with desertification a potential end result (as evidenced in Tara Gasfields and Surat Basin, QLD. No reference. You only have to go there to see the evidence firsthand). Waste-water from any unconventional gas "fracking' extraction is not safe, not for humans, livestock and/or native fauna. It is harmful. Santos lies. Unacceptable. They must not be allowed access to 'reasonable use of the waters of rivers for conservation or irrigation'. Reasonable to SANTOS is excessive to the rest of us.

3. Pollution - Fugitive Gas Emissions

Flaring/ Light Pollution and toxic methane-mix emissions are known to wreak havoc on environmental /ecosystem balance. Animals and humans are sensitive to these emissions, amongst others (noise etc) and may have their immunity compromised at best, or end up with neurological problems, renal failure, tumours etc at worst. (Deaths have been recorded in Tara/Dalby area Qld, and many children and families are suffering from methane gas/ chemical poisoning)

The internationally renowned, world class, Siding Spring Observatory was built in the Warrumbungles Shire, due to it's huge wide open Dark Sky!! There are 50 plus telescopes monitoring the dark sky and providing invaluable scientific data, that assists Australia's leading astrophysicists to continue their pioneering research. And many international researchers depend on their data. This must count for a lot, and yet Santos' giant flare stacks will interfere with the total Darkness needed to maintain A1 high class scientific research. The Siding Springs Observatory is an exceptional institution and their work must not be compromised by one 'bad' project and an absolutely self-centred industry. Shame on SANTOS for not recognising or caring about the broad detrimental effects of their gas extraction and flaring off waste methane. There must be a total commitment to NO FLARE STACKS, and emissions must be contained and monitored. STOP SANTOS flaring in the Pilliga Forest. Dry woodland forests and fire/ flares are utterly incompatible. If SANTOS cared about our forests, water and air, and not in actively accelerating climate change, they would not suggest flaring off their waste emissions (as best practice!). In any developing country they would reuse the methane and tap it as an invaluable energy resource!!! SANTOS has no idea about forest dynamics or resource management. Stop SANTOS claiming their fugitive emissions are SAFE!!

4. Incompatible Land use Strategies.

Fracking alongside agriculture and forestry is highly incompatible with all Sustainable Land Use principles. Depleted water resources will adversely affect soil fertility (by reducing it through compromising the biotic flora), and pasture quality, crop yields etc. One industry ought to assist and potentially benefit another. However, Fracking and gas extraction assist nothing and ruin everything. Seriously. Total Ecosystem destruction is the end result. Not worth it. Despite what Santos claims about CSG processes and Land Use compatibility, existing Agriculture and Forestry industries must be prioritised over fracking and mining. The livelihoods of farmers, their families and their future must be considered. Respecting the Land Rights of indigenous Gomeroi tribes has been completely ignored, by not allowing them a true say in this matter. Their voices have been silenced. Their good will must not be further manipulated by SANTOS false claims (jobs, wealth, etc) and a good PR team. It would be criminal to further impoverish or marginalise NSW farmers and local indigenous people, just to earn low gas export dollars and create a potential nationwide gas deficit. Honestly, SANTOS has a nerve to say it knows anything about Sustainable or compatible Land Use. Or that it consulted widely with indigenous Gomeroi custodians. Nothing is compatible with CSG. Leave it in the ground!

5. Climate Change, Desertification

SANTOS will potentially clear substantial sites of Pilliga Forest fragmented remnants at a time when we need to expand and plant forests (to make the rain), not destroy critically important recharge zones for the Great Artesian Basin and Murray Darling Basin. It is incomprehensible that SANTOS be allowed to deforest, when our priority as a nation ought to be to mitigate climate change. Our climate has changed. It is drier, hotter, and in some places wetter. Extreme winds, fires and floods are the norm. So please, Let s rethink the energy equation. Fracking costs us almost everything. Health. Water. Ecosystems. Renewable resource energy options don't waste and destroy. They are cleaner and cost effective! Forests and water can be left to grow and flow in the environment if Renewable Energy is developed instead. Come on. Start making some sense of the insanity of SANTOS NGP concept. It will never be cost effective! Tell SANTOS to stop wasting good money on a

bad project and opt for developing Renewables instead! The NGP is absolutely unviable (without grants and tax breaks), and SANTOS has grossly exaggerated potential predicted revenue from the project. They have no evidence to the contrary. The project is not justified. Santos' own coal seam gas export activities in Queensland have caused gas prices to rise and supply to become unpredictable.

I am frustrated and annoyed by the lies, scaremongering and false propaganda put out by SANTOS (especially regarding human health, safety and Job security.) The reality is almost the opposite and SANTOS expect us to take their lies and just disappear. Food and Water Security are top priority in this era of wealth 'adjustment', carbon 'offsets' and rising inequality, where corporations eliminate the little people as if playing a game of real life MONOPOLY. Not playing your game SANTOS. Your rules of engagement are not fair or just. The people will have their say. When governments listen and do the right thing then I will believe in democracy. Until then this is corporate bullying, plain and simple.

Coal seam gas is harmful to health. CSG extraction is simply wrong, one of the worst industries man ever created. It messes around with natural law, and leaves a trail of tragedy and disaster in it's wake. We know this.

From Pennsylvania to California, to Blackpool, to Tara Queensland. Neither the NSW Government nor Santos have investigated or dealt with the serious health effects of coal seam gas now appearing in peer-reviewed research in the United States.

Whoever allows this to continue to go ahead will no doubt have difficulty sleeping at night. And what lies will they have to tell their children to appease their conscience. Human greed is a curse that will only die when there is nothing left to exploit. We are close to the edge. Water is Life. Australia has a harsh climate, one that challenges any industry. CSG will not help Australians to get rich quick! All it will do is contribute to our collective demise. Halliburton's technology is unsafe (depleted Uranium!!) and entirely destructive to ecosystem function. Blowing up our aquifers is not a science fiction gimmick. It is absolute insanity. Ecocide. Genocide. An unnecessary evil none of us need, whether in Narrabri or elsewhere on this planet.

I do not apologise for the directness and passion expressed in this objection/ submission against the SANTOS NGP.

I pray that sense will prevail. Say NO to CSG. STOP SANTOS. PLEASE. SANTOS is not telling anyone the truth about CSG!

I ask you, the EIS review panel, to do the right thing. STOP SANTOS Tell the NSW government that the people are wiser than we thought. They know this is a Forestry Corp NSW and state run CSG industry. The people can see through the wool being pulled over their eyes.

I urge the Government to reject the Narrabri Gas project and make the Great Artesian Basin recharge zones off-limits to gas extraction and mining. Immediately.

Yours sincerely Julia DesBrosses SOW ELEMENTREE Consultancy 0447 301859