

Mr Stephen O'Donoghue  
Team Leader – Planning Services, Resources Assessments  
NSW Department of Planning and Environment

15 May 2017

Dear Mr O'Donoghue,

**RE: Objection to SSD 6456 Narrabri Gas Project**

Thank you for the opportunity to object to the Narrabri Gas Project (NGP). Despite the proponents efforts to satisfy the Secretary's Environmental Assessment Requirements (SEARs) they fall far short in a number of areas. There are also a number of inherent risks and negative externalities that require the project to be rejected by the Department of Planning and Environment (DPE).

This submission will list the key reasons that the project must not go ahead beginning with the false premise that developing gas in NSW will contribute to alleviating the gas crisis that has been caused by a lack of regulation of the LNG export market. Santos has downgraded their gas reserves in NSW to 'contingent' and written off the NGP to \$0 value due to the NGP not being financially viable. Hence, in their own words Santos do not want to proceed with this project.

**1. The Narrabri Gas Project is a high-risk option for gas supply to NSW**

There are a number of reasons why the Narrabri Gas Project will not provide gas supply security to NSW:

- Until a contract for the gas is signed or a gas reservation policy is implemented there is no guarantee that gas from the NGP will not be exported from QLD. If there is a higher profit for exported gas then Santos is under legal obligation to shareholders to maximise profits.
- NSW successfully negotiates gas supply contracts from interstate suppliers
- The project is high risk due to a questionable profit margin given that gas production from the Pilliga is one the highest in the country per gigajoule.
- Santos have downgraded their gas reserves in NSW and written off the NGP to \$0, hence there is little guarantee that the project will ever proceed, in fact there is very strong evidence that it will not.
- Santos are in a very poor financial state and reported over \$1billion loss in 2016
- There are more efficient demand side measures such as increasing efficiency of gas use in the manufacturing sector that would provide greater gas security and also have climate benefits.

**2. There is insufficient deep bore groundwater monitoring data.**

The Narrabri Gas Project risks precious water sources, including the Great Artesian Basin—Australia's largest groundwater aquifer. In a worst-case scenario, the water removed for CSG extraction could reduce water pressure in the recharge areas—potentially stopping the free flow of waters to the surface at springs and bores across the whole Great Artesian Basin.<sup>1</sup>

Santos' own 'Narrabri Gas Project, Groundwater Monitoring and Modelling Plan', shows Santos proposed to drill 5 Deep Aquifer Monitoring Bores (DAMBs). Santos have only drilled two DAMB's within the proposed project area. In the monitoring plan Santos state that 'DAMB groundwater monitoring data is required to describe the baseline conditions prior to commencement of any CSG water abstraction'. Therefore by failing to adequately model baseline conditions and also have sufficient data to model potential interactions with freshwater aquifers Santos have failed to address the SEARs on groundwater.

### **3. The Santos groundwater model must be independently assessed.**

The lack of data renders the Santos groundwater model unreliable. The CSIRO have checked the model however they are part funded by coal seam gas companies and are therefore not independent. Santos state that they will have 'make good' provisions in accordance with the NSW Aquifer Interference Policy, however the Santos business model is based on short term fossil fuel delivery and they are therefore not a reliable business to 'make good' for any groundwater depletion in the long-term. What are Santos' 'make good' provisions for freshwater aquifer drawdown?

### **4. The Santos exploration program has caused and is still causing significant soil and groundwater contamination.**

Santos has already contaminated a freshwater aquifer in the Pilliga with uranium at levels 20 times higher than safe drinking water guidelines, as well as lead, aluminium, arsenic and barium<sup>2</sup>. In addition, there have been over 20 reported spills and leaks of toxic CSG water from storage ponds, pipes and well heads. Creeks in the Pilliga run into the Namoi River—a part of the Murray Darling Basin. This system is vulnerable to contamination from drilling fluid spills and the salty treated water produced from the proposed 850 wells.

### **5. Coal seam gas may have a higher rate of greenhouse gas emission per unit of energy than coal**

Santos are amongst the top 20 highest polluting companies in Australia. New information on the fugitive emissions from coal seam gas production suggests that current estimates are greatly underestimated. What are Santos' measures to reduce fugitive emissions from the coal seam gas fields? Santos' admission that they intend to base their business plan on a global 4 degrees rise in temperature is unacceptable.

## **6. Thousands of tonnes of salt waste will result from the project**

Santos has no solution for disposing of the hundreds of thousands of tonnes of salt that will be produced. Between 17,000 and 42,000 tonnes of salt waste would be produced each year. This industry would leave a toxic legacy in NSW. If they put this salt waste product in land fill it will be a high risk of leaching into surrounding soil, groundwater and surface water through flooding and seepage through protective barriers. This salt will need to be managed in perpetuity, what is Santos' responsibility for salt waste that has left their site and if it is stored by a waste facility how will they demonstrate they are able to manage the site in perpetuity.

Yours sincerely,

Prue Bodsworth

E: [bodsworthprue@gmail.com](mailto:bodsworthprue@gmail.com)