

21st May 2017

Submission on Narrabri Coal Seam Gas Project

The Clarence Valley Conservation Coalition Inc. (CVCC), is strongly opposed to Santos' plans for its 850 well coal seam gas (CSG) production project in the Pilliga Forest and adjacent farmland near Narrabri.

Introduction

The CVCC, a Grafton-based community group, was founded in 1988 and since then has been involved in commenting on a range of environmental issues both in our local area and further afield.

We have had first-hand experience of gas-mining in our immediate area in recent years firstly with the drilling of a test well by Metgasco at Glenugie near Grafton and then through other CSG activity north of us (particularly at Doubtful Creek near Kyogle and Bentley near Lismore/Casino). Many people in the local community were so concerned about the threats posed by this industry that they became involved in the campaign to prevent it going ahead in the Northern Rivers.

So the CVCC has a broad knowledge of this industry and its potential impacts on areas where it is developed. This has been informed by our research on the environmental, social and other impacts of CSG and unconventional gas mining elsewhere – particularly in Queensland and the United States.

While we are not resident in the area to be directly affected by the proposed Santos development, we believe as citizens of this nation we have a responsibility to be concerned about environmentally-damaging developments and to oppose them.

Some of the reasons for our opposition to this very large project are listed below.

1. The Impact on the Pilliga Forest

a) The Pilliga Forest, the largest temperate woodland in NSW, will be severely impacted by Santos' project. This is a very important natural area – a high conservation value forest. Santos plans to clear nearly 1000 ha of the Pilliga Forest. It's not only the size of the clearing that is an issue but the fact that it will be in patches that will result in the fragmentation of a

much larger area. This, of course, means cuts to the connectivity between habitat areas so that wildlife no longer has vegetated corridors for movement around the landscape. This loss of habitat and corridors will have a serious impact on many native fauna species in relation to their food sources and protection from predation.

Furthermore, it is more than likely that the various pipeline and track corridors and well surrounds (as has been observed in Queensland's Chinchilla gasfields) will become weed-infested wastelands, threatening the ecological integrity of uncleared areas of the forest.

b) What should be borne in mind is that around the nation extensive natural areas such as the Pilliga Forest have been greatly reduced by human activity since European settlement. And this clearing is still continuing. If we are serious about preserving our native flora and fauna and stopping the slide of many species towards extinction, we have to preserve areas like the Pilliga Forest. In the view of the CVCC the claimed economic benefits of the Santos project do not justify the degrading of this important forest.

c) The development will threaten the survival of a number of threatened flora and fauna species. Threatened fauna species include the Barking Owl, Glossy Black-cockatoo, Regent Honeyeater, Black-striped Wallaby, Eastern Pygmy-possum, Koala, Pilliga Mouse, South-eastern Long-eared Bat and Pale-headed Snake.

d) Another issue of concern to us is that public land – and important public land – will be alienated if the development proceeds in the Pilliga Forest. The forests of this state belong to the people of the state – not to any Government (although these supposedly represent the people but are, after all, of a temporary nature because of electoral terms) or to any mining company.

e) A further risk is the increased danger of very hot fires in the Pilliga Forest. There have been some serious bushfires in this area in the past. The addition of fugitive emissions and gas flaring to the forest has the potential for really disastrous fires. It should be borne in mind that we are already facing an increasing risk of fires in areas such as this because of climate change. Adding methane to the mix makes for a greater likelihood.

2. Threat to the Great Artesian Basin

a) The water produced as the gas is extracted will be considerable over the life of the project (estimated at 37.5 GL). As the aquifer which will be affected recharges the Great Artesian Basin, this will have an impact on the Basin. Since gas-mining in Queensland has already been shown to have affected the Great Artesian Basin, there is considerable concern about further impacts on this very important underground water supply.

b) Disposal of the large volumes of produced water is also another issue. Santos has claimed it will treat the water to remove the salt but just how effective that treatment will be so that the water can be released into the environment is another matter. There have been serious breaches by mining companies in the past in relation to disposal of saline water.¹

¹Santos has already been responsible for pollution of aquifers in the Pilliga with toxic wastewater. <u>http://www.lockthegate.org.au/revealed epa investigation report shows extent of pilliga contamina tion</u>

Transpacific, which treated AGL produced water from Gloucester gas mining, was fined by Hunter Water in 2014 for the illegal release of produced water into a sewer. http://www.theherald.com.au/story/2775107/agls-fracking-wastewater-dumped-in-sewers/

c) Ensuring compliance is always a major issue. Just how well the treatment is monitored by government will be crucial if the project goes ahead. Unfortunately governments do not have a good record in monitoring compliance. They tend not to invest resources in compliance, either through having a strange notion that companies will always "do the right thing" or because they simply don't care whether conditions of consent are complied with – unless some pesky member of the public forces them to notice non-compliance!

d) Disposal of the volume of salt extracted from the produced water is another concern. Peak salt production is stated to be 115 tonnes per day, which means that in a peak year 41,900 tonnes of salt would need to be disposed of. According to Santos, it will be disposed of in landfill. Where will this happen and what effect will it have on surface run-off as well as on local groundwater at the landfill site?

3. <u>Climate Change Effects</u>

a) CSG and unconventional gas projects that have been developed in Australia and elsewhere are not greenhouse-friendly (or even more greenhouse friendly than coal) as the industry and many politicians claim. This project will be the same. Methane is a much more potent greenhouse gas than carbon dioxide.

b) While the burning of it for energy creation produces carbon dioxide just as happens with coal, there is a major issue with fugitive emissions from leaking wells and venting of the gas from pipelines. Proponents of the industry conveniently choose to ignore this when promoting it as a better energy source than coal. The Queensland experience has shown that problems of leakage in an operational gasfield are quite common.

c) Moreover, once the industry has extracted all the gas that it economically can and has capped its wells, there will be a continued leakage of methane as the well-capping fails over time.

d) Furthermore the claim that gas will serve as a relatively long-term transition to renewables is looking increasingly unlikely given the rapid development of renewables and large-scale battery technology – technologies which are much more appropriate in a carbon-constrained world. So there are questions about the long-term financial viability of this project. Is it likely to become a stranded asset?

4. Effect on Dark Sky and the Siding Springs Observatory

a) Santos' activities are already affecting the Siding Springs Observatory near Coonabarabran. This observatory in the newly established Dark Sky Park hosts the largest optical telescopes from national and international universities and research entities. The site contains more than 50 telescopes used by a variety of institutions. And there are plans for further telescopes – as long as the sky remains dark.

b) From 2013 light emissions from Santos' gasfield exploration have increased to the point where the Bibblewindi large flare creates more light pollution than the entire nearby town of Coonabarabran which has over 3,500 residents.

c) Santos plans to triple the number of pilot flares and double the number of large flares including constructing 50 metre high flare stacks with an average 30 metre high flame above it. There is no mention that they will enclose the flares and thus limit the light pollution.

d) This is a very important research facility as well as an important tourist attraction to the region. Its viability should not be compromised by Santos' project.

5. Inadequacy of Santos' EIS

The size of this very large EIS is no indication of its adequacy. There are far too many unknowns. For example there are no maps showing where the 850 wells and all the other infrastructure will be situated. The NSW Government should insist that Santos provide this information and that it should be on exhibition for public comment before the project is assessed by government.

6. The Project as a Solution to the "Gas Crisis" in Australia

Any suggestion that developing this massive project will solve the so-called gas shortage crisis is arrant nonsense. There is plenty of gas being mined in this country but the trouble is that practically all production is being exported. This means the domestic market is threatened by shortages. This has happened because successive governments have failed (except for Western Australia) to secure domestic supply with some form of reservation policy as happens in other parts of the world (including the USA). In addition there have been suggestions that the some gas companies are holding back production in some operational fields. This presumably would have an impact on domestic supplies. Quite obviously there is an appalling lack of transparency in the national gas market – something which should be fixed by government.

Conclusion

The CVCC understands that there is widespread opposition to this development throughout the region. It is obvious that it does not have a social licence to move from its destructive exploration stage to an even more destructive production stage. The benefits claimed by the industry and others – largely referring to job numbers and an economic boost to the area – are outweighed by far by the long-term damage that this industry will do over a wide area of the north-west – to the natural environment, to climate, to agriculture, to water supplies, to clean air, and to community health. Furthermore, if Santos is permitted to go ahead, the impacts of its gas-mining will remain with the region long after it has made its pile and left.

The Clarence Valley Conservation Coalition believes that this project should be rejected.

Leonie Blain Hon Secretary