

31 July 2020

Office of the Independent Planning Commission NSW  
Level 3, 201 Elizabeth Street  
SYDNEY NSW 2000

Dear Commissioners,

## **Narrabri Gas Project**

### **OVERVIEW**

The Cotton Australia submission has two parts, firstly it addresses comments made in the opening day of the hearing: NSW DPIE's comparing a cotton farm's water use to CSG activities; as well as comments about public liability insurance, including those made by Santos CEO Kevin Gallagher. Secondly it contains several observations pertaining to the DPIE's Assessment Report that we would like The Commission to consider.

### **EXECUTIVE SUMMARY**

Cotton Australia is lodging this submission as a 'comment'.

Our membership has a diverse view of CSG which has enables our policy to be built on these principles:

- Protection of the sustainability of aquifers that underlie irrigated and dry land cotton production and their communities.
- Protection of high value agricultural land from CSG extraction activities.
- Any impact intended or unintended must be fully compensated by the CSG industry and guaranteed by government.
- That any decisions and approvals are made on best available scientific knowledge.
- Grower rights are respected during the land access negotiation process, with landholders receiving fair levels of compensation in recognition of the impacts of development.

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Cotton Australia notes:

- the conditions suggested by the NSW DPIE,
- that the Department has compiled an extensive list,
- as the conditions currently stand, they include requirements for plans that are yet to be drafted,
- a number of these plans will be iterative, informed by the required monitoring data and in turn used to update the plans during the life of the project,
- the consent proposed is ‘deferred commencement’ with Phase 1 enabling Santos to undertake more appraisal work, ie setting up the monitoring<sup>1</sup>, that presumably inform these plans,
- this condition assumes sufficient information/data can be provided to satisfy Stage 2 onwards, and
- data which is not subject to commercial-in-confidence will be provided to the public via “SEED” the portal<sup>2</sup> for *Sharing and Enabling Environmental Data* in NSW.<sup>3</sup>

However, Cotton Australia still has concerns about aquifer impacts, leaky wells, the management of salt as well as the loss of prime agricultural land.

## OBSERVATIONS MADE DURING THE COMMISSION’S HEARING

### Less drops per cotton crop

DPIE’s (The Department) Assessment Report states “an average cotton farm which uses around 4 GL of a water” page xii quote:

*For comparative purposes, the project would extract an average of 1.5 GL of saline water from the coal seams each year. The extraction of this water is predicted to result in the annual leakage of a maximum of 60 ML of water a year from the shallower aquifers (about 200-250 years from now), which is a low volume of water compared with the 165 GL of water currently being extracted from these aquifers by other water users each year, or compared to an average cotton farm which uses around 4 GL of water a year.*

This rule of thumb comparison was also made by Mr Kitto in the Department’s verbal presentation.

Cotton Australia is perplexed by the comparison and does not understand its relevance. We also question the Department’s assertion, firstly a farm growing cotton is likely to be growing a number of crops through the year, cotton just one on offer. It is also incorrect to assume a cotton crop is 100% irrigated, it can be just rain fed or a combination of both rain and groundwater.

Importantly both the mix of crops and water used will vary due to the season and previous rainfall. In the last few years the drought has seen many farms with no crop whatsoever. The Santos proposed facility however will not be as flexible, rather it will still need water to operate during dry times to meet its contracted production requirements. Also, the manner in which this water is extracted and the salt that will come with it, are profound differences to agricultural or stock and domestic use.

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<sup>1</sup> DPIE – IPC 25/6/20 meeting transcript p 25, <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/transcripts-and-material/2020/narrabri-gas/department-transcript.pdf>

<sup>2</sup> <https://www.seed.nsw.gov.au/>

<sup>3</sup> DPIE – IPC 25/6/20 meeting transcript p 28

It must be noted that water used for irrigation has been sustainably allocated via licence across the catchment. That is, having a licence does not guarantee a specific volume of water, rather a share of what is available in any one year. Each year State Government regulators determine how much water is available in each system. What water could be allocated to irrigators comes AFTER the basic needs of the environment and critical human requirements are met.

For example:

- In 2016-17 inflows into the state's northern river systems was 7800GL
- In 2017-18 those northern rivers received just 542GL, just 7 % of the previous year's total
- In the first six months of 2018-19 these rivers received 30GL (NSW Water Jan 2019)
- In the 2018-19 season, cotton farmers in northern NSW cotton valleys received 0% of their general security water allocation due to drought
- The 2018-19 cotton crop was less than half that of the previous year due to drought.<sup>4</sup>

The Department's statement also does not reflect the efforts of agriculture as a whole to improve crop productivity and water use efficiency. For the Australian cotton industry there has been a concerted focus of *less drops per crop since 1992*.

As reported in our second Sustainability Report from 1992 to 2019, there has been a 48 per cent decrease in the water required per bale of cotton. This equates to a 97 per cent increase in the bales of cotton grown per megalitre (ML) of water (effective rain and irrigation). In other words, Australian cotton growers are now:

- using almost half as much water to produce a bale of cotton, compared to 1992
- producing almost twice as much cotton from a ML of water, compared to 1992.<sup>5</sup>

It is on that basis Cotton Australia questions the Department's 'rule of thumb' noting also that it is unlikely any holders of a Groundwater water licence in the Namoi Valley would have approval to access 4GL. Cotton Australia would like an explanation as to what pertinent information was meant to be conveyed by this statement.

## Public liability insurance

In his presentation Santo MD and CEO Mr Kevin Gallagher stated:

*Farmers who host natural gas activities are protected by indemnities offered by Santos in land access agreements, and by extensive regulation and legislation.*

*Following the recent withdrawal of some insurers from the market, peak industry bodies including the Insurance Council, APPEA, National Farmers Federation, AgForce and Cotton Australia are working together to provide assurance to farmers that they are, and will continue to be, appropriately protected in relation to public liability.<sup>6</sup>*

The issue of insurance coverage was also raised by a number of presenters during days 1 – 5 of The Commission's public hearing.

<sup>4</sup> Source: <https://cottonaustralia.com.au/assets/general/Publications/Industry-overview-brochures/The-Australian-Cotton-Water-Story.pdf>

<sup>5</sup> Source: <https://cottonaustralia.com.au/assets/general/Publications/Sustainability-Reports/2019-Australian-Cotton-Sustainability-Report-Full-Report-2.pdf>

<sup>6</sup> Source: [https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/03/narrabri-gas-project/public-hearing/transcripts/200720-day-1-narrabri-gas-project-public-hearing-transcript\\_redacted.pdf](https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/03/narrabri-gas-project/public-hearing/transcripts/200720-day-1-narrabri-gas-project-public-hearing-transcript_redacted.pdf) p34 para25

With members in both NSW and Qld Cotton Australia confirms it is one of a number of landholder members of the working group convened by the GasFields Commission Queensland. This group also has members from the gas industry and government. It has been convened in response to some landholder concerns about not being able to secure liability insurance for their farming operations.

This workgroup has been able to confirm there are multiple insurers continuing to offer public liability insurance for landholders who have gas activities on their properties. Cotton Australian and other landholders groups have advised their members that they should discuss coverage with their insurance agent/broker and ensure they understand the extent of the cover being offered.

As GasFields Commission Queensland's latest update states [In the interim]...

*Australian Petroleum Production & Exploration Association (APPEA)<sup>7</sup> and the Insurance Council of Australia<sup>8</sup> are working together to ensure there is continued availability of public liability insurance to cover landholders with gas activity (including gas infrastructure) on their properties. Their shared objective is to resolve this issue in a timely manner to provide comfort and greater certainty to landholders, insurers and the onshore gas industry.<sup>9</sup>*

The Commission is referred to the GasFields Commission Queensland's website, particularly the 12 June 2020 update for further details: <https://gasfieldscommissionqld.org.au/news/937470>.

## **OBSERVATIONS ABOUT THE ASSESSMENT REPORT'S FINDINGS**

In respect of upholding the principle of 'no negative impacts on land and water resources' Cotton Australia takes this opportunity to make the following observations:

### **Aquifer impacts and leaky wells**

Cotton Australia remains concerned that Santos has assumed that the groundwater occurs in simple discrete layers, yet our understanding is that they are in fact complex. We are also concerned that we will not know until Phase 1 whether there are any existing weaknesses, if these are uniform across an aquifer or occur at specific locations.

Consequently the project proposal gives little consideration to leaky wells or faulting, be that as a result of Phase 1 operation onwards or as a legacy post production. Cotton Australia however remains concerned about groundwater depressurisation and drawdown in aquifers within the project area and surrounds.

Cotton Australia asks: is The Commission confident that the proposed Groundwater Management Plan plus the performance measures for water management and well integrity, and as currently listed in the proposed development consent, are sufficiently rigorous to address these concerns?

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<sup>7</sup> Australian Petroleum Production & Exploration Association, <https://www.appea.com.au/>

<sup>8</sup> Insurance Council of Australia, <https://www.insurancecouncil.com.au/>

<sup>9</sup> Source: <https://gasfieldscommissionqld.org.au/news/937523>

## Salt management

The Department in its 26<sup>th</sup> June 2020 meeting with The Commission confirmed:

- that Santos had undertaken sensitivity modelling regarding climate change,
- that the location of the salt ponds would be above the 1 in 100 year flood, however
- the Department would consider the final design of these ponds at a later point.

We note that at this meeting the 'beneficial reuse' of the salt as a consent condition was also discussed and the information the Department has to date indicates the chemistry of salts would classify them as general waste. Also that the Department currently is of the view the salt could to be disposed to landfill.<sup>10</sup>

Some of Cotton Australia's members located in the Queensland gas fields can make use of process water; hence we acknowledge the possibility of legally safe and responsible alternative use of the extracted water has its merits. Hence the evaporation of the extracted CSG water, following treatment, should not be allowed to just evaporate.

However, we remained concerned that there is still a knowledge gap concerning the extracted water's contents, particularly the salt. Also by the Department's acknowledgement<sup>11</sup> that only over time will "the precise nature of the water coming out of those deep aquifers" will be known. To date the indications are that the salt is at quite different concentration levels to that of the Queensland gasfields.

Cotton Australia asks The Commission to give particular attention to Dr Stuart Khan's verbal and written submissions. As indicated in his 23/7/2020 presentation to The Commission he has articulated a number of concerns about the storage of the Narrabri extracted salt, be that in ponds, dedicated pits (landfilled) or in containers.

We also ask The Commission to consider the Performance Measures for both Salt Management and Produced Water Management. Are they appropriate? In that respect, is The Commission satisfied the Produce Water Management and Salt Management Plans themselves can manage what Phase 1 discovers, let alone the subsequent Phases of the proposed consent conditions?

## Loss of prime agricultural land

Whether individual or combined the abovementioned impacts would have a detrimental impact on the surrounding landscape. Prime agricultural land is already facing increasing pressure from alternative land uses.

Landholders are long term residents of the community who are of the view that the land concerned is an asset that belongs to all of the community. This asset is 'loaned out' as a result of an approved resource extraction activity, be that mining or CSG. In that respect landholders want their community's assets returned in fit and proper order for the community to continue to derive aesthetic or economic benefit from it.

In Cotton Australia's view the land should be fully restored to its former agricultural quality. This is in terms of quality of soil, landform and catchment hydrology, including surface and ground waters.

<sup>10</sup> DPIE – IPC 25/6/20 meeting transcript p12 <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/transcripts-and-material/2020/narrabri-gas/department-transcript.pdf>

<sup>11</sup> In the 25/6 meeting p13, <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/transcripts-and-material/2020/narrabri-gas/department-transcript.pdf>

Similarly, our members like other landholders consider that just as they operate within regulatory/compliance requirements, so too should neighbours who are involved in CSG extraction industries.

As a final comment, CSG would be a new industry to this region, the risk of this activity over time creeping beyond the current proposed project's boundaries also needs due consideration. In that regard Cotton Australia asks The Commission to consider whether the Department's use of a 'deferred consent' is the most appropriate and will not result in development creep.

## **CONCLUSION**

It is for all these reasons Cotton Australia opposes the Extension Project to the Vickery Mine and we ask The Commission to give due regard to our concerns on behalf of our members and the community of the Namoi Valley.

Thank you,



Jennifer Brown  
Policy Officer  
Cotton Australia