

## Questions from People for the Plains representative

### Narrabri Gas Project CCC Meeting – September 2018

#### Questions to Santos

##### **2.a. Community Consultative Committees.**

The guidelines as posted on the Departments web site state that a CCC that follows the guidelines has to be established as explained in the below extract:

*When this code applies*

*This code will be applied by a condition imposed on all prospecting titles granted, renewed or transferred after 1 March 2016.*

*Titles issued before this time will continue to be bound by any existing conditions on title relating to community consultation. This may include:*

*(a) for coal and petroleum titles, compliance with the requirements of the Guideline for community consultation requirements for exploration, as amended from time to time.*

*(b) for minerals titles, the establishment of a landholder and community liaison program.*

Q.a. Has Santos had any “prospecting titles” renewed for PEL238 since 1st March 2016?

Q.b. Has Santos any “prospecting titles” for PEL 238 currently in with the approving Department awaiting approval?

Q.c. If none of the above, can Santos give the dates when any such “prospecting titles” for PEL 238 are required to be renewed?

##### Response:

- a) Petroleum Exploration Licence (PEL) 238 has not been renewed since 1 March 2016.
- b) A renewal application for PEL 238 was lodged with the Department on 1 July 2016.
- c) There are no statutory timeframes in which the Department must determine a renewal application.

##### **2b. Income from the Wilga Park Power station**

Eastern Star Gas (ESG) derived an income from the sale of electricity supplied from the Wilga Park power station to the NSW electricity grid (this was well documented in ESG Returns and Quarterly Reports).

Q.a. Has Santos derived any, before disbursements/distributions, income return from the sale of electricity from the Wilga Park power station to the NSW electricity grid?

Q.b. If so then where can this be found in the Financial Statements applying specifically to the Narrabri Project and PEL 238, or has Santos recorded this income elsewhere? Please specify where the information is recorded.

##### Response:

- a) Yes
- b) Income from the sale of electricity from the WPPS is disclosed in the Santos Ltd Statutory Accounts in accordance with Australian Accounting Standards and the Corporations Regulations 2001. WPPS forms part of the NSW Assets which in turn falls within the “Other Assets” group of assets within the Statutory Accounts. The Santos share of production, sales volumes and revenue from all “Other Assets” ie: including but not limited to WPPS is disclosed within the Directors Report (refer page 21 of the Santos

Annual Report 2017) and also the Segment note to the Financial Statements (refer page 64 of the Santos Annual Report 2017).

## **2c. Landholders Incentive Fund**

From the Santos Fact Sheet called '*Working with Landholders*', Santos intends to set up a Fund equivalent to 5% of Santos' statutory annual royalty payment to reward landholder's who host the Santos operation.

[https://narrabrigasproject.com.au/uploads/2018/02/Fact\\_sheet-Working\\_with\\_landholders\\_web.pdf](https://narrabrigasproject.com.au/uploads/2018/02/Fact_sheet-Working_with_landholders_web.pdf)

Q.a. Has the Landholder Incentive Fund been set up?

Q.b. Does this Landholder Incentive Fund need to be registered and follow Guidelines/Regulation similar to the Community Benefit Fund, if so then who will be the overseer of the Land holder Incentive Fund? The same question applies should the Landholder Incentive Fund be exempt from Government Guidelines/Regulation?

*The Working with Landholders* Fact Sheet gives a general, and at times a very detailed description of what a Landholder can expect from hosting the Santos Operation. As Santos, as well as Eastern Star Gas, have derived income from the supply of gas from wells on private land near the Wilga Park power station with Santos set to derive more income from the gas from the wells on Tintfield, while not paying royalties on this gas:

Q.c.a. Will Santos be paying the Landholder of the land where the six (6) wells of Tintfield field are located, a payment equal to the entitlements as described in the *Working with Landholders* fact sheet?

### **Response:**

All petroleum exploration and production activity in NSW must be conducted in accordance with a petroleum title issued under the *Petroleum (Onshore) Act 1991*. There are four types of titles issued in NSW - Petroleum special prospecting authorities, Petroleum exploration licences, Petroleum assessment leases and Petroleum production leases.

All petroleum production in NSW is designated as State Significant Development and a development consent under the *Environmental Planning and Assessment Act 1979* must be in place before a petroleum production lease can be granted. Santos submitted the State Significant Development application and associated Environmental Impact Statement for the Narrabri Gas Project to the NSW Department of Planning and Environment in February 2017.

The Landholder Incentive Fund will be established when consent for the project has been determined, and if project consent is granted, the relevant petroleum production lease/s have been issued. The Fund will be equivalent to 5% of Santos' statutory annual royalty payment and landholders will receive a share of the Fund proportionate to the amount of their land being utilised by Santos.

The payment of compensation to landholders for activities associated with petroleum exploration and production activities is the responsibility of the titleholder and is undertaken in accordance with Part 11 of the *Petroleum (Onshore) Act 1991*.

Santos pays compensation in accordance with the land access agreement in place with the landholder.

## **2d. Fracking**

In their response to Santos' RTS, Hunter New England Health raised a concern around Fracking and that if carried out then a Health study should be done on the possible health effects.

Santos has verbally stated in the past that "There will be no fracking associated with the Narrabri Gas Project".

Q. Is Santos prepared to put into writing this statement and put the "Fracking Debate" centring on and around the Narrabri Gas Project and PEL 238 to bed once and for all?

### **Response:**

The word fracking is an abbreviation of the term hydraulic fracturing.

The Forward to the Narrabri Gas Project Environmental Impact Statement submitted to the Department of Planning and Environment (DPE) clearly states that: "Due to the geology of the deep coal seams, hydraulic fracturing will not be needed to extract the gas and Santos is not seeking approval to use this technology."

The Forward for the EIS is available from the DPE Major Projects website at <https://majorprojects.accelo.com/public/348faaf9cd874b643e01015cc4fd62f4/00a%20Foreword.pdf>

## **2.e Groundwater flow direction.**

In the RTS Santos claims that most of the recharge flow into the recharge area of the GAB and ultimately into the GAB itself is from the Warrumbungle's south east. Yet the recently released GISERA Report, using Santos provided information as in the EIS and from other non-Santos sources states that the recharge flow is from a Eastly direction. The GISERA Report is based on Modelling while the Santos RTS reply is based on Books; neither is based on actual localised recent field studies.

The information in attachment 1, is from the Santos document referred to as *Narrabri Gas Field – Water Monitoring and Modelling Plan*, and shows that Santos RTS is in conflict with or did not consider all aspects of Recharge water direction in their RTS response.

Q.a. Will Santos now commit to the groundwater flow direction monitoring that Santos stated would be done as part of Santos' Water Monitoring program as stated in the *Narrabri Gas Field - Water Monitoring and Modelling Plan* of 2012, see attachment 2, as well as in the Application and ultimately Approval, for the Dewhurst Pilot Expansion, and other Applications?

Q.b. Why did Santos not do the stated groundwater flow direction monitoring as stated in documentation that formed part of Santos Management Plans and Applications to the NSW Government Department now called Department of Planning and the Environment?

### **Response:**

There is no conflict between the information provided in the RTS and the Monitoring Plan to which the question refers. There are two different, although related, issues being discussed, namely recharge flow direction and recharge volume.

Santos' RTS (see pp. 6-68-6-70) is responding to claims made in submissions that the Narrabri Gas Project (NGP) is in a major recharge zone of the Great Artesian Basin (GAB). Some submitters also claimed that the highest rates of recharge to the GAB were in the Pilliga East State Forest (within the NGP area).

The RTS provides detailed information from independent research conducted by the Federal Government's Australian Bureau of Rural Sciences, Geoscience Australia and CSIRO that has found that "primary recharge

to this region occurs via the Warrumbungles, located south of the project area, where higher rainfall and greater outcrop area exists (Figure 6-14).”

This independent research also re-affirms that the NGP is located in an area that is a ‘low’ recharge area for the GAB. Naturally, direct and indirect groundwater recharge is not limited to one or two areas. It occurs across a wide geographical area, as depicted in Figure 6-14 of the Santos RTS.

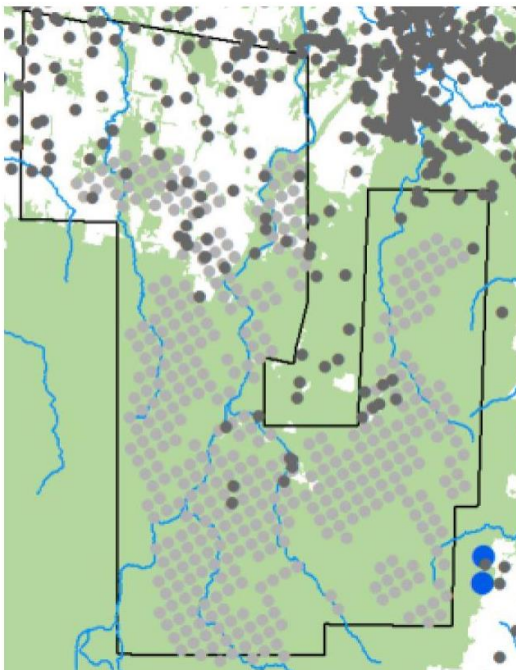
With respect to flow direction, the recently released GISERA report titled “*CSG-induced groundwater impacts in the Pilliga region: prediction uncertainty, data-worth and optimal monitoring strategies*” 31st March 2018 shows that the movement of the groundwater within the Pilliga Sandstone is from the south, south-east and moves in a north, north-westerly direction (see Figure 10 of the GISERA report on page 29). The velocity/direction of the groundwater flow is also noted by GISERA to be likely influenced by the proximity and shallowness of the outcropping of the Pilliga sandstone to the east of the project area. This statement is consistent with the information provided in our Water Monitoring and Modelling Plan.

Although the Shallow Aquifer Monitoring Bore network has been designed to allow for flow direction monitoring, there is already a substantial amount of publicly available, independent research that has been conducted by highly reputable research organisations concerning recharge rates and flow directions of the southern beds of the Great Artesian Basin.

### **3a Gas Field layout**

**Q. Is the figure 1, taken from a current GISERA Report, a true and accurate representation of the Narrabri Gas Project - Gas Field for which Santos has provided an EIS in February of 2017 (purple dots are used to indicate the gas wells, black dots are in the main, shallow private stock and domestic bores)?**

Figure 1



### **Response:**

The image referred to appears to have been extracted from *Figure 6: Percentiles of predicted drawdown in model layer 6 corresponding to the GAB aquifer Pilliga Sandstone obtained using the highly parameterized modelling approach* from page 24 of the GISERA report published in May 2018 with reference:

Janardhanan Sreekanth, Gladish Dan, Gonzalez Dennis, Pagendam Dan, Pickett Trevor, Cui Tao (2018) *CSG-induced groundwater impacts in the Pilliga region: prediction uncertainty, data-worth and optimal monitoring strategies*. CSIRO, Australia.

The GISERA report states in Section 2.1 on page 15 that “The parameterisation is intended to reflect a generic case of coal seam gas development from the Pilliga forest area.” (emphasis added).

Therefore, although the boundary highlighted in the figure appears to be that of the Narrabri Gas Project Area, the report is based on a **generic** case of coal seam gas development.

The GISERA report is available from <https://gisera.csiro.au/wp-content/uploads/2018/06/Water-8-Final-Report.pdf>.

#### **4a Leewood Irrigation**

Q.a. When is Santos going to resume irrigating at Leewood as irrigation using treated produced water formed an essential part of the REF “*Leewood Produced Water Treatment and Beneficial Reuse Project*” and the 2017 Narrabri Gas Project EIS, both, in showing that the use of treated produced water had only a low impact on the existing soil and groundwater conditions and that a good monetary return could be made by using this water (business case in REF)?

Q.b. Information to hand concerning the Lucerne Crop cut in January of 2018, is that the crop left the state of NSW and went to Queensland. Will Santos now inform the CCC and the public where this Lucerne went and what it was used for

Q.c. If it was for fodder, what animal was feed the Lucerne and were they in a feed lot type arrangement?

#### **Response:**

On 1 August 2016, the Land and Environment court rejected a claim, brought by the Environmental Defenders Office acting for the People for the Plains, that the approval of Santos’ Leewood Phase 2 project was invalid. People for the Plains appealed this decision in the NSW Court of Appeal. On 14 March 2017, the Court of Appeal unanimously ordered that the appeal be dismissed and that People for the Plains pay costs.

The NSW Court of Appeal found that the treatment and irrigation of water at Leewood were activities engaged in to satisfy a condition of PAL 2 held by Santos and that the beneficial reuse of the water was a requirement of the grant of PAL 2, forming part of the petroleum exploration activities as a whole.

Santos ceased irrigation of the lucerne crop at Leewood in February 2018 while the EPA was reviewing its position in relation to appropriate authorisations.

On 12 October 2018, the Environmental Protection Agency (EPA) issued a Penalty Notice Advice for \$1,500 for ‘the use of water otherwise than as authorised by an approval/licence’. Santos has, through the relevant administrative review process, requested that the penalty infringement notice issued by the EPA be reviewed and withdrawn because it considers the necessary authorisations for irrigation at Leewood are in place. Santos notes the EPA’s finding that no environmental harm occurred, or is likely to occur, in relation to the water treatment and irrigation of water at Leewood.

Water irrigated at Leewood meets Australian Standards for irrigation, however, Santos is currently storing all water in our state of the art water holding ponds at Leewood.

Lucerne produced using irrigation at Leewood has been used for stock feed in various locations.