

MEETING MINUTES

Narrabri Gas Project (NGP)

Water Technical advisory Group (WTAG)

Meeting # 1

DATE / TIME

19 May 2021
3.45pm

LOCATION

The Crossing Theatre (upstairs meeting room)
Tibbereena Street, Narrabri

FACILITATOR

Garry West

MINUTE TAKER

Trish Dandridge

ATTENDEES

- ◆ Garry West (Independent Chair)
- ◆ Fabienne d’Hautefeuille (DPIE Water)
- ◆ Cate Barrett (DPIE Water)
- ◆ Randall Cox (Independent Expert)
- ◆ Mike Williams (Independent Expert)
- ◆ Cr Cathy Redding (Council Representative)
- ◆ Jack Warnock (Local groundwater user)
- ◆ Edward Trindall (Narrabri LALC)
- ◆ Annie Moody (Santos)
- ◆ David Gornall (Santos)

Guest

- ◆ Todd Dunn (Santos)
- ◆ Cassie Hay (Santos)

Apologies

- ◆ Conrad Bolton (Local Landholder representative)

Discussions

NO.	DISCUSSIONS
<p>1. Welcome</p> <p>WTAG advisory group approval</p> <p>Recording of minutes</p>	<p>Chair thanked everyone for their attendance and stated he had been appointed as Chair for the NGP Community Consultative Committee (CCC) and for the four Advisory Groups.</p> <p>The Chair stated there was a letter of approval from the NSW Government Planning, Industry and Environment approving the Water Technical Advisory Group (WTAG) and that member names would be publicly listed on the Santos website.</p> <p>The Chair informed the WTAG that the meetings would be held in-line with the CCC guidelines and that non-Government members were required to complete a Code of Conduct and Conflict of Interest form.</p> <p>The Chair asked members if there was any objection to the recording of the minutes for secretariat purposes with the minutes audio being deleted once the minutes were final and approved. There was no objection.</p>
<p>2. Presentations</p>	<p>Presentation 1: Santos delivered a presentation. Agenda items included:</p> <ul style="list-style-type: none"> • Scope and objective of the WTAG • Santos Update

	<ul style="list-style-type: none"> ○ NGP Development ○ NGP Approval, Management Plans, update and likely timing <ul style="list-style-type: none"> ▪ Role of WTAG in reviewing Management Plans
<p>3. Key topics discussed and questions raised</p>	<p>Conditions of consent Issues discussed relating to conditions of consent included:</p> <ul style="list-style-type: none"> ● requirement to develop Water Management Plan, including sub-plans as follows: <ul style="list-style-type: none"> ○ Erosion and sediment control plan ○ Produced Water Management Plan (including managed release protocol and salt management plan) ○ Irrigation management plan ○ pollution incident response management plan ○ Site Water Balance ○ Surface Water Management Plan ○ Groundwater Management Plan (inclusive of the Groundwater modelling plan), and ○ Dust Suppression Protocol. ● membership and role of WTAG (to review and advise on Water Management Plan and Field Development Plan) ● EPA has declined to participate on WTAG <p>Comment: Technical Expert commented that DPIE Water’s representation on WTAG will be important for successful functioning of the group. Action captured below.</p> <p>Management Plans</p> <ul style="list-style-type: none"> ● The Water Management Plan and sub-plans will initially be prepared to address Phase 1 of the project (staged approach approved by Department of Planning, Infrastructure and Environment) ● Prior to Phase 2, plans will be updated and reviewed by WTAG and agencies again ● The Erosion and Sediment Control Plan, Produced Water Management Plan, Irrigation Management Plan and Pollution Incident Response Plan are all already required plans under other approvals/permits. <p>Erosion and Sediment Control Plan</p> <ul style="list-style-type: none"> ● Based on the principles of the Blue Book and sets up the guiding principles of how Santos will: <ul style="list-style-type: none"> ○ Manage erosion and sediment controls ○ Minimise the extent of disturbances ○ Separate clean and dirty water, ○ Manage spoil/soil stockpiling etc. ● Control measures will be determined depending upon the phase of development e.g., construction or operation. <p>Q. What is the Blue Book? A. It is the standard in NSW to manage erosion and sediment control during construction and operations and is a condition of Santos’ environmental protection license.</p> <p>Produced Water Management Plan (PWMP)</p> <ul style="list-style-type: none"> ● Existing PWMP required as a condition of tenure and was developed in consultation with the EPA. ● Plan to be updated to include Phase 1 scope. ● Will cover off on requirement for Salt Management Plan and Managed Release Protocol because Phase 1 of project does not involve production of solid salt product or release to Bohena Creek. <p>Irrigation Management Plan (IMP)</p> <ul style="list-style-type: none"> ● Existing IMP established for Leewood approval ● Updated plan is effectively the same as existing. <p>Q. What happens to the runoff of water E.g. during a storm? A. Santos has to consider weather conditions before and after irrigation events as required under IMP and Trigger Action Response Plan (TARP). Santos maintains records</p>

of weather conditions and irrigation operations which are available if there are any community questions or EPA enquiries.

Q. Are there provisions for collecting the run-off and recycling it or re-using it?

A. No, the water is retained in ponds and irrigation ceased until the rain event has passed.

Pollution Incident Response Management Plan

- Existing plan required under *Protection of the Environment Operations Act 1997*
- Plan to be updated to include Phase 1 scope

Q. Are you going to pump water back into Bohena Creek during a flood event as this is an important cultural area? E.g., the managed release of water during a flood event.

A. There is no proposed managed release of treated water during Phase 1.

Site Water Balance

- This plan provides an overview of how much water is being produced and how much water Santos is taking from other sources.

Q. What are your reporting requirements for water take?

A. Santos is required to report under the conditions of consent, and commitments are made in the management plans. Reporting will be annual, as required under the conditions of consent.

Surface Water Management Plan

- This plan includes information on existing surface water management systems, risks/impacts from Phase 1, mitigation measures and monitoring requirements.

Q. What watercourse flow measurement controls are in place? If we are going to measure flow, we need to know what the control is.

A. The answer relates to the methodology employed to calculate flow at each of the proposed watercourse flow monitoring points. Question taken on notice. Santos will follow up at next meeting.

Groundwater Management Plan

The following was discussed in relation to the Groundwater Management Plan:

- lack of alluvial sediments overlapping project area to significant degree
- overview of baseline groundwater monitoring data
- how further groundwater monitoring data will be collected to calibrate the groundwater model
- performance criteria and trigger levels for aquifers in the project area
- ongoing model improvement and verification.

Q. Are the Groundwater Monitoring Reports going to be presented to the CCC?

A. Yes, there can be an agenda item to discuss the reports presented, they will also be available on the website. But the reports are currently only proposed to be annual, as required by conditions of consent.

Q. In relation to the baseline data for alluvial water resource, GAB water sources and GOB water sources, can Santos indicate when the information was gathered (i.e. during a drought period, agricultural season) and the date when the data was gathered?

A. The presentation of baseline data in the Groundwater Management Plan describes the observed trends but does not interpret the potential causes of observed trends. Disentangling such data is a complex task and is unnecessary as the proposed monitoring program will be able to demonstrate that the project is not having an effect on high value water sources. The strategy is to measure for changes in formations that are deeper, have stable groundwater pressure, are more adjacent to the coal and can provide an earlier indication of model reliability.

Q. How long is Phase 1 as this will determine the input of data for Phase 2?

A. Phase 1 is minimum of 12 – 18 months long, and all management plans need to be approved and in place before Phase 1 can commence.

Q. What Government data is integrated in Phase 1 in the GOB. Is this just focused

	<p>on the new bores and how many bores are there?</p> <p>A. There are about five bores which are mostly in the Project footprint. Santos action here to review with Department whether there is more up-to-date information about new and proposed government groundwater monitoring sites that may be incorporated into the groundwater monitoring plan.</p> <p>Q. Are there more bores planned?</p> <p>A. Yes Santos proposes to install more monitoring bores prior to the commencement of Phase 1, as described in the Groundwater Management Plan.</p>
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Actions

NO.	ACTIONS	ACTION BY	DUE DATE
1	List of acronyms to be established and circulated	Santos	ASAP
2	DPIE Water to confirm ongoing representation on WTAG	Fabienne	Prior to next meeting
3	Determination of what regular reporting will be made to the CCC and frequency	Chair	Prior to next meeting
4	Fabienne to send Santos the telemetered locations and ID information for the sites	Fabienne	ASAP
5	Methodology to calculate flow at watercourse flow monitoring points	Santos	Next meeting

Next Meeting (TBC)