

MEETING MINUTES

12 March, 2014

Minutes: Santos Community Committee - Narrabri Shire
Wednesday, 12 March 2014
Narrabri Golf Club, Narrabri

Attendance: David Ross (Chair), Tahnee Laycock (Secretary), Annie Moody (Santos), Vesna Rendulic (Santos), Tony Pickard, Kym Bailey (Santos), Victoria Hamilton, Michael Guest, Ron Campey, Brendan Warnock, John Tough, Terry Hynch.

Apologies: Ken Flower, Jon Maree Baker, Ian Duffy.

	Discussion	Action/By Whom
1. Welcome, apologies and introductions	<p>The chair opened the meeting at 5:38pm. Chair welcomed committee. Introduced Santos Representative: Kym Bailey. The members tonight, who were not present at the previous meeting of the SANTOS CCC, were informed of the decision of the CCC at the February meeting that “the secretary be given permission to use recording equipment for recording the meeting, to be used for minutes only and to be destroyed afterwards.</p>	
2. Previous meeting's minutes	<ul style="list-style-type: none"> - Chairman started by going through the actions from the February meeting. - Santos committee member advised the soil analysis for Leewood is ongoing but will source the information and have it back, out of session, before the next meeting. - Santos committee member advised they didn’t expect to hear back from the DRE until early next month in regard to formalising the committee. - Santos committee member advised the erosion management plan has copyright to the sub- 	Santos to provide soil analysis of Leewood site

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	Discussion	Action/By Whom
<p>3. Overview of Wilga Park power station and its operation</p>	<p>contractor and have asked permission to release that and haven't got a response back. They (the sub-contractor) have sent an excerpt document, however would not be enough for what the committee is looking for. This has been referred back through Santos' project team and Santos committee member will follow up on this before the next meeting.</p> <ul style="list-style-type: none"> - EnergyAustralia action to respond to questions raised in February's meeting was completed. - Santos action to provide conversion of figure into petajoules is completed. - An action on Santos and the Chair to organise a site visit is still ongoing. <p>Comment: Committee member asks Santos to provide the conversion factor for standard million cubic feet. Agreed by Santos. Chair confirmed with committee members that minutes from the last meeting were reflected as was discussed and accepted. Agreed by all present.</p> <p>(Slide 1) Overview of Wilga Park Power Station presented by Kym Bailey. Kym introduced himself as the Operations Manager for Santos and also the project manager for the Leewood Phase 1 project expansion. Kym has been an employee of Santos for over 30yrs and worked on a number of projects with them both onshore and off. He was assigned to Narrabri some two years ago to oversee the improvement initiatives required when Santos came on site some years ago.</p> <ul style="list-style-type: none"> • Wilga Park Power Station is located 16 kilometres west of Narrabri, just off Yarrie Lake Road. • Natural gas driven power station • Supplied electricity into the grid between 2004 and 2009 • Current capacity of 16 Mega Watts • Approval in place to expand to 40 MW - enough to power 6000 homes - or the entire town of Narrabri 	<p>Santos will follow up on erosion management plan</p> <p>Santos and Chair to arrange a site visit (ongoing)</p> <p>Santos to provide the conversion factor from standard cubic feet to peta joules</p>

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	<ul style="list-style-type: none"> • The power station is currently shut down and has been for the last two years • A complete Ready-For-Start-Up Review has recently been completed for the power station and pilot wells <p>(Slide 2) The Aerial view in slide two helps you understand the physical size of the power station and how big it is.</p> <p>(Slide 3) Power station gas supply.</p> <ul style="list-style-type: none"> • Under government approval natural gas is supplied to Wilga Park Power Station from the Bibblewindi pilot • It is important to note that when you convert natural gas through to an energy source whether it is a pipeline, gas sales agreement or power station there is shrinkage along the way. At some point in time the industry has to convert from volumetric numbers to energy numbers. • General rule of thumb is K250 scfd of gas supply per 1 MW of power. Kym will get the metric values for scfd • The natural gas is transmitted through a pipeline operating at around 1800 KPA <p>(Slide 4) Approval requirements.</p> <ul style="list-style-type: none"> • The approvals required to operate the power station include: <p>*Petroleum Exploration Licence: gives the approvals to go and look for gas. An organisational decision is made by the person who owns this licence whether it is economic or not to go to the next stage.</p> <p>*Petroleum Assessment Licence: Under certain guidelines, this licence allows you to take gas out of a well and do something with it. One guideline stipulates that you cannot make any money from the gas as it hasn't kicked in royalties yet. The advantage is to fully test pilots without flaring.</p>	<p>Santos to provide the metric values for scfd</p>

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	<p>*Petroleum Production Licence: Gas Supply Agreement (required between Joint Venture). Exploration is finished and you are able to produce gas and sell it.</p> <p>*High Voltage Supply Agreement: This is with the electricity company that you supply to.</p> <p>*Joint Santos Essential Energy Operations Procedure: Santos is the operator and operates on behalf of EA The operations procedure is unique to Wilga Park power station.</p> <p>Q. Committee member: Does Santos sell its gas at the well head to EnergyAustralia, who then pipe it out to the power station and then they sell it back to Santos to generate power?</p> <p>A. Santos: No. That's not quite how it works. If we were supplying gas to pipeline operator outside of the power station, we would have a gas sales agreement with them. That takes into account all of the regulatory matters upstream of that. In the power station we have agreements in place to ensure each joint venture doesn't breach any of the conditions of the assessment license. Santos operates the power station on behalf of our joint venture partners.</p> <p>(Slide 5) Fuel gas conditioning. Gas comes into the power station and is used for fuel gas. But we have raw gas coming in at high velocity and high pressure. The pressure needs to be dropped and when you drop pressures it forms liquids. Liquid needs to be separated so gas goes into the recip engine. There are all sorts of processes you need to go through to extract that gas from a pipeline and condition it so it's suitable for a reciprocating gas fired engine with a generator on the back of it.</p> <p>(Slide 6) Power plant Jenbacher 1.5 & 4.5 HP (horsepower). Converts the gas molecules to electrical energy. We use Jenbacher 1.5 HP engines per 1KW generators units and 4.5 HP engines for the 3 Meg units. Jenbacher is one of the best and most efficient recip engines available today (Austrian).</p>	

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	<p>(Slide 7) 66 KV alternator. The gas is now shifted into the engine and converted that into rotary power. Sitting on the end of that rotary power is a generator. That generator makes the electricity. High voltage and uses a lot of energy. There are all sorts of regulations involved when running these machines. In the event of an emergency all ESD equipment are associated with shutting the engine down very quickly.</p> <p>(Slide 8) Control system. All these things need to be controlled and we use Schneider control equipment. It is a fully integrated and automated, high quality and reliable system. This can be operated around the clock without the use of an operator. However, there are two full time operators assigned to the power station. The information gathered here is sent to our engineers, who analyse the data and look for any problems we may have coming up. The whole control system and engines are fully monitored out of Melbourne and are able to very quickly tell us whether any cylinders aren't firing like they should, temperatures are down or if we need to change spark plugs etc. Fully remote maintenance operated system.</p> <p>(Slide 9) High voltage output to grid. The connections are made through to the grid where we can share that power with the community. This is the point of custody change. Once the power leaves our power station we have little control on where that power goes or how it transmitted across the grid.</p> <p>Q. Committee member: Are all these photos from Narrabri? A. Santos: Yes. They are all of the Wilga Park Power Station in Narrabri.</p>	

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	<p>(Slide 10) Power station uses.</p> <ul style="list-style-type: none"> • Located on freehold land. Santos owns this land. • Used in conjunction with Tintsville pilot • Area is farmed by Narrabri High School rural projects • Scheduled for first power to Narrabri first week of April following two year shut down • Landholder notifications are required – 6 weeks notification period • Noise monitoring equipment is set up and ready for data collection <p>The future of the power station all depends on the field gas. I hope to get enough gas out of the Bibblewindi area of power to be able to further expand the power station and put more through the 4Meg units on the back end of them and maybe take it up to 40MW capacity that it was designed for.</p> <p>Q. Committee member: Wilga Park Power Station is used as base for Tintsville flaring and water storage, is the Tintsville gas going into the plant? A. Santos: No At this point it is not economic for us to do that.</p> <p>Q. Committee member: I thought you didn't have the authority as it was outside of the PPL? A. Santos: That's right we don't have the authority but we could seek it. It's not an economic project.</p> <p>Q. Committee member: Exhaust gas monitoring - are you going to monitor for nitrous oxides? A. Santos: Yes. Those engines have catalytic converters on them and we do manage and monitor exhaust temperatures which gives us a lot of information on emissions. Computerised engine management systems analyse this data.</p> <p>Q. Committee member: So you're not actually going to sniff the exhaust gases and take samples like that to check true readings on the samples like you do on other high temperature exhausts? A. Santos: I am not aware we intend to do that, no.</p> <p>Q. Committee member: So you are relying on electronic devices to tell you what's in your exhaust? A. Santos: Yes. We are relying g on the technology.</p>	

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	<p>Q. Committee member: Does the EPA requirements come in at around 16 megawatts? A. Santos: I am not sure. I will take on notice and get back to the committee. Q. Committee member: Why do you call it natural gas? Why the change to call it natural gas instead of methane gas? A. Santos: I guess it's your own interpretation of natural gas. I have always called it natural gas. It's a common industry standard. It is a term recognised in the marketplace. Q. Committee member: What happened to the old Bohena sites? They are all shut in, so will the pipeline itself be cut off in Coonarah. A. Santos: Eastern Star Gas operated the Coonarah conventional gas site. That's a steel pipeline to a separator from that field. When Santos arrived we could not find any accurate data or records around pipeline integrity management plans. So we assessed that pipeline to ensure the cathodic protection was operating and that there had been some internal and external inspections through that pipeline. A decision was made at the time to run an intelligent pig down through that pipeline to ascertain any internal corrosion. We also measured and monitored the cathodic protection to ensure that it was in good shape. All data that came back indicated the pipeline was in good order. Effectively what we have done is run biocide in that line and mothballed it. Comment: An intelligent pig is a device that runs inside the pipeline and it x-rays the pipeline as it runs through it. You can vary the speed of that depending on the gas pressure you put behind it. It also does thickness testing as it progresses through the pipeline. The data makes very good reference to where it actually is. So it measures where it is as the time to x-ray is taken. Data is then collected from the machine at the other end and we analyse and assess the pipeline for any internal damage. Q. Committee member: With respect to the memorandum of understanding to supply the hunter valley and Newcastle, is that still to occur? A. Santos: Santos is not providing gas to Newcastle. But will take on notice. Q. Committee member: 66Kv is how many volts? A. Santos: 66,000 volts. The transmission line that runs past the power station is a 66,000 volt power</p>	<p>Santos to find out if the EPA requirements come in at 16 mega watts</p> <p>Santos to notify committee if gas to be supplied to Newcastle</p>

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	Discussion	Action/By Whom
	<p>line.</p> <p>Q. Committee member: So how many amps?</p> <p>A. Santos: When talking amps you are talking about a power factor. I need to convert horse power back to the power factor. Your power factor and amps are directly proportional to the wattage that is transmitted at the generator room and transmitted into power lines. If we talk about wattage instead of amps it is a lot easier to follow. The energy going into the power lines is in watts. Megawatts.</p> <p>Q. Committee member: I am trying to work out how much power you put out?</p> <p>A. Santos: The megawatt rating is what the power output is.</p> <p>Q. Committee member: With shrinkage, are there fugitive emissions coming out of that and is that what rises are used for?</p> <p>A. Santos: When you run a gas product from point a to point b, it comes out of the well with certain value. Conventional gas has CO₂, methane, ethane, propane in it. By the time it gets to point b it has got to be in state that is useful for point b. So it may have something like, high CO₂ in it for example. So you have to remove that CO₂ to get it to the right number. For example from 10% to 3%. By removing that 7% of CO₂ out of that gas, you have actually reduced the volume of the gas.</p> <p>Q. Committee member: So where is it going?</p> <p>A. Santos: Depends on what you're taking out. CO₂ for example. Runs through an absorber process. It is then recycled into a product. The CO₂ is then blown off that product into the atmosphere.</p> <p>Q. Committee member: Are the gas pipelines black plastic/rubber?</p> <p>A. Santos: The gathering lines are, yes.</p> <p>Q. Committee member: What's a gathering line as opposed to a transport line?</p> <p>A. Santos: Gathering lines gather the gas between wells with low pressure. That's where you go from plastic lines to steel lines. Because the pressures are low at the well head and the design of the plastic is such that it will be satisfactory for up to 1000 KPA.</p> <p>Q. Committee member: How many compression stations would you need for how many wells?</p> <p>A. Santos: It's a calculation based on what volume you are producing at the time.</p> <p>Q. Committee member: How much compression can one compression station handle?</p>	

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<p>4. General Business</p> <p> a. Other Business</p>	<p>Q, Committee member: If you had 15 wells and the gas was “pissing out” how many compressor stations would that require, one or more?</p> <p>A. Santos: There’s not a simple answer but you would need a big one. The one out at Bibblewindi you would need 800 HP and it has the capability of compressing up to 2-3000 KPA. All compressors have this capability. But we could never do that because of liquid drop out.</p> <p>Q. Committee member: Have you put the sound suppression back in the Jenbacher? I know they were overheating at summertime.</p> <p>A. Santos: Yes. Intercooling was the issue.</p> <p>Q. Committee member: Do you have a separate pipeline operator or does Santos operate the pipelines?</p> <p>A. Santos: Santos operates the pipeline from the well head to point of sales. The pipelines are operated under the EHSMS the environment health and safety management plan.</p> <p>Committee member: “Santos was fined for Aquifer Contamination with the source being from Bibblewindi Water Storage Facility (No. 3) Dam. The CCC attended this complex in November 2012 and the question was asked as to the integrity of these dams and their ability to perform in all conditions of working stress. The Santos representative informed the committee that the liners were of the best possible quality and that any leak could be detected and the expected life of the liner was twenty years or so. Given all this, and that fact that in the original Sydney Morning Herald release it quotes that “these liners were of poor quality, which resulted in the integrity of the liner being questionable”.</p> <p>Q. Committee member: When did Santos realise that the liners were below standard? And did Santos knowingly mislead the committee on that tour and the general public on other tours? And any other presentation where the integrity and safety of the Bibblewindi complex and dams was discussed? I would like this to be put down on notice.</p>	

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	<p>A. Santos: I will take this on notice. It is not my nor Kym’s role to respond to that. I will honour the commitment to have a response back in 10 working days.</p> <p>Q. Committee member: When is Santos going to discuss the new development of 850 wells with the Narrabri CCC and allow a proper briefing on the project and the EIS as will be indicated Santos has done in the consultation section of the EIS document?</p> <p>A. Santos: The first part of the process in lodging an EIS is to prepare a preliminary environmental assessment which has to be lodged to government to get the director general’s requirement. There is no public consultation for that component. The Narrabri CCC will be extensively consulted as part of the EIS. The PEA for the gas field project will be lodged soon, in the next couple of weeks. Once that gets lodged to government I’m assuming it goes public on their website etc., I will give a copy to the committee that we can discuss. In relation to Dewhurst and Bibblewindi EIS, it to the committee through monthly updates.</p> <p>Comment: When the previous Santos representative was here, it was established that before you put in the EIS, Santos would come and let this committee go over it with you. However at the time it was agreed that the information was kept under the hat as long as we could have input into it. This committee was formed on this commitment. Our timeline to be able to discuss anything is limited.</p> <p>A. continued. The committee will not be provided with copies of documents prior to lodging to the assessment authority. In relation to REF documents, where we have put in a review of environmental factors. They have been raised here and are included in monthly updates. With the Dewhurst and Bibblewindi EIS there is a public consultation period of 8 weeks. There are multiple places to retrieve copies of this including for example Santos office, Narrabri Shire Council, the Narrabri Operations Centre plus the website. The public have 28 days to comment on this.</p> <p>Comment: When you present that document to public view, it basically is the full final document.</p> <p>A. continued. It articulates to the assessment authority what we intend to do and what evidence we have to support our project. All submissions from here are responded to.</p>	<p>Santos to respond to questions raised regarding recent aquifer contamination and associated questions within 10 days</p>

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	<p>Comment: The point of this is missed. When Santos gives this document to the government and it is released to the public it says that you have discussed with the Narrabri CCC certain things. I can assure you, you have not discussed these things.</p> <p>A. continued. When we lodge that to the department as an EIS it will state that we meet with the Community Consultative Community on a monthly basis. We do. We do not meet with this committee solely for that particular EIS. It's a Community Consultative Community committee to address various matters associated with our operations. I will not be providing copies of application for approval of projects prior to them being lodged to the regulator.</p> <p>Comment: The wording that goes in this seems to indicate that the committee have read all the documents, with Santos, had it all pointed out and we agree with it.</p> <p>Comment: The committee has had an opportunity to read the document at the public locations, information on the public submission is included in the Monthly Update and the committee will be briefed upon request after a submission has been lodged to the assessment authority. Committee member then read the following statement and asked that it be put on record concerning the information Santos has been willing to discuss in relation to the REF documents. "What Santos has brought to the CCC is a very poor project overview without any meat on it. This can hardly be called consultation. This committee represents the community and as such asks questions that the community raises about the project. So far Santos has not provided the committee with any details other than those provided at its presentations in December 2013. If Santos is going to quote that they consulted with the Narrabri CCC committee on the project then it needs to give more details on the EIS on the project. The State Government minister says he is big on community consultation. Santos says and quotes in writing that it also is."</p> <p>Kevin Humphries is on record in a radio interview with 2MxFM on the 3rd of March 2014 as saying "the EIS will be into the governments departments in April 2014". The MoU the EIS would be in government hands in July 2014.</p>	

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	Discussion	Action/By Whom
b. Site visit	<p>Committee member states that they have tabled four questions derived from the greater general public and reads;</p> <p>Q 1: What health impact studies has Santos commissioned and /or assessed, for and on behalf of their employees or contractor's and residents living within a 15km radius of the Leewood ponds?</p> <p>Q 2: What are the government requirement's (of Santos) and to the public, if you, Santos, or a contractor to you or any other legal entity working on a project that involves work on or is connected to the Narrabri Gas Project, decide that there is a need to hydraulically fracture any well or seam within the proposed Narrabri Gas Project?</p> <p>Q 3: "We won't affect the quality or quantity of the water available for other users". Santos has stated the above remark in a local paper. How and why does Santos know the above stated to be true?</p> <p>Q 4: A freedom information request had to be used to obtain the information with regard to the leakage of the Narrabri Bibblewindi water storage ponds, the time frame and results. Santos has kept this information from the general public, with regard to many mitigating factors including the 20 times above safe drinking levels of uranium, as such, will Santos now admit they have misled and given false statements when your advertising in the north west magazine March the 3rd 2014 clearly states "We won't hide any of our activities" etc.?</p> <p>Q. Committee member: Talking about VOC's and radio nucleartides and traces...</p> <p>A. Chairman: It's been covered in last month's meeting. I will forward the response to you.</p> <p>Committee member wanted it noted that they found an advertisement in the North West Magazine misleading. Santos: Noted.</p> <p>The offer of a site tour has been proposed and postponed two times due to lack of commitment from committee members. Santos has stated that as a lot of work goes into its organising, if the offer is not accepted this time Committee members can attend the Community Site Tour but will not have access</p>	<p>Santos to respond to questions</p> <p>Action for the Chairman to forward VOC response to committee member</p> <p>Chair to notify committee of the two possible dates of site visit</p>

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	Discussion	Action/By Whom
c. Social impact assessment	<p>to technical staff as they would on the tour specifically for the CCC. The Chairman will allocate two different dates in April for members of the committee to choose one of those dates.</p> <p>Santos is happy to have Social Impact Assessment people here for the next meeting. They are ready to do the data collection. What Santos proposes is for GHD to come to the meeting in April to specifically capture information from the members of the CCC about what your concerns are in relation to the social impact statement. This should take 3 hrs. GHD will have categories like health, welfare, housing and infrastructure etc., there will be set things they will address. Before the meeting Santos will get a list of the categories from GHD to send out to the committee to prompt them to think of the things that may be an issue. Say by next Wednesday the list of categories will be given to the CCC Chairman to distribute to the committee. From here we will give two weeks for the committee to think about, talk about and prepare. Ideally it would be good to get this information back to GHD so when they arrive they can have complied that into some sort of order. The date of April 9 for the next committee meeting was accepted by the committee.</p>	
d. Next meeting and issue to discuss		

Next Meeting Topics: **GHD - Social Impact Assessment**

Date of next meeting: **April 9, 2014**

Meeting Closed: **7:22pm**

Appendix 1: Wilga Park Power Station

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Attachment 1: Actions

Action Raised	Date Raised	Progress Made
Action for Santos to provide committee with full soil analysis including analysis of bacteria of the Leewood site next year when it is available. As well as providing regular soil checks to ensure no contamination is occurring.	11th December	Ongoing
Action for Santos to explore the option of formalising the committee.	18 th June	Ongoing waiting on response from DRE
Santos to provide further details on the erosion management plan for the flow line project	18 th September.	CCC will be provided a copy of this once it is finalized.
Santos to arrange site visit	12 th February	Ongoing
Chair to notify committee of details of site visit	12 th February	Ongoing
Committee to determine whether to hold discussion in one night or over consecutive nights	12 th February	Finalised
Santos to provide the conversion factor from standard cubic feet to peta joules	12 th April	
Santos to provide the metric values for scfd	12 th April	
Santos to find out if the EPA requirements come in at 16mega watts	12 th April	
Santos to notify if gas to be supplied to Newcastle	12 th April	
Santos to respond to questions raised regarding recent aquifer contamination and associated questions within 10 days	12 th April	

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Action for the Chairman to forward VOC response to committee member	12 th April	
Chair to notify committee of the two possible dates of site visit	12 th April	

Santos Community Consultative Committee – Narrabri Shire Meeting

Wednesday 12th March – 5:30 pm to 7:30 pm

Narrabri Golf Club

1.	Welcome, apologies and introductions	5:30 – 5:35	All
2.	Previous meeting minutes	5:35 – 5:55	David Ross
3.	Overview of Wilga Park power station and its operation	5:55 – 7:00	Kym Bailey
4.	General Business <ul style="list-style-type: none">• Other Business• Site visit• Social impact assessment• Next meeting and issue to discuss	7:00 – 7:30	All

Meeting Action Item Response

Reference:	20140312_NCCC
Subject:	Meeting Action Items – February 2014 Meeting Narrabri CCC
Request date:	12 February 2014
Requested by:	David Ross Chair Narrabri CCC
Background Request:	1. The plan for NGP is to produce 200 terajoules/day. Can Santos provide conversion of figure into petajoules?
Response:	<p>Item 1 - Santos to provide conversion of figure into petajoules</p> <ul style="list-style-type: none"> • Natural gas is measured by volume converted to a measure of energy. • The standard metric measurement for energy is a joule (j) • A joule can be defined as the work required to produce one watt of power for one second, or one "watt second". • The gigajoule (GJ) is equal to one billion (10^9) joules. • The terajoule (TJ) is equal to one trillion (10^{12}) joules. • The petajoule (PJ) is equal to one quadrillion (10^{15}) joules. • 1 petajoule = 1,000,000 gigajoule or 1,000 terajoules • The Narrabri Gas Project could produce up to 200 TJ of gas per day which is equivalent to half of NSW's natural gas needs. • In general, the gas industry uses TJ to talk about flow rates (i.e. 200 TJ/day) but PJ in terms of total reserves or annual demand/supply.
Briefing Officer:	Annie Moody Team Leader, Community and Land
Date:	5 March 2014

Question – CCC

Santos was fined for Aquifer Contamination with the source being from the Bibblewindi Water Storage Facility (No. 3) Dam.

The CCC attended this complex in November 2012 and the question was asked as to the integrity of these dams and their ability to perform in all conditions of working stress.

The Santos representative informed the committee that the liners were of the best possible quality and that any leak could be detected and the expected life of the liner was twenty years or so.

Given all this, and the fact that in the original Sydney Morning Herald release it quotes that “these liners were of poor quality, which resulted in the integrity of the liner being questionable.”

Question: When did Santos realise that the liners were below standard? And did Santos knowingly mislead the committee on that tour and the general public on other tours? And any other presentation where the integrity and safety of the Bibblewindi complex and dams was discussed?

Question - When is Santos going to discuss the new development of 850 wells with the Narrabri CCC and allow a proper briefing on the project and the EIS as will be indicated Santos has done in the consultation section of the EIS document?

What Santos has brought to the CCC is a very poor project overview without any meat on it. This can hardly be called consultation.

This committee represents the community and as such asks questions that the community raises about the project. So far Santos has not provided this committee with any details other than those provided at its presentations in December 2013.

If Santos is going to quote that they consulted with the Narrabri CCC committee on the project then it needs to give more details on the EIS on the project. The State Government minister says he is big on community consultation. Santos says and quotes in writing that it also is. **Question - So where is the more detailed information to allow for proper community consultation by this committee?**

Kevin Humphries is on record in a radio interview with 2MaxFM of the 3rd of March 2014 as saying “the EIS will be into the government departments in April 2014.” The MOU the EIS would be in government hands in July 2014. **Question - So which date is correct, as it is now March 2014?**

QUESTIONS FROM THE GREATER GENERAL PUBLIC TO THE NARRABRI SANTOS
CCC

TABLED THE 12TH MARCH 2014 NARRABRI GOLF CLUB

It is requested that printed answers be supplied by SANTOS to each individual question, thank you.

QUESTION 1

What health impact studies has SANTOS commissioned and/or assessed, for and on behalf of their employees or contractors and residents living within a 15 km radius of the LEEWARD PONDS?

QUESTION 2

What are the government requirements (of SANTOS) and to the public, if you, SANTOS, or a contractor to you or any other legal entity working on a project that involves work on or is connected to the Narrabri Gas Project, decide that there is a need to hydraulically fracture any well or seam within the proposed Narrabri Gas Project?

QUESTION 3

“We won’t affect the quality or quantity of water available for other users”

SANTOS has stated the above remark in a local paper.

How and why does SANTOS know the above statement to be true?

QUESTION 4

A Freedom of Information request had to be used to obtain the information with regard to the leakage of the Narrabri Bibblewindi water storage ponds, the time frame and results.

SANTOS has kept this information from the general public, with regard to many mitigating factors including the 20 times above safe drinking levels of uranium, as such, will SANTOS now admit they have misled and given false statements when your advertising in the north west magazine March the 3rd 2014 clearly states

“We wont hide any of our activities” etc ?

Thankyou, for and on behalf of the Greater General Public and the NBRI CCC.

Response to Questions tabled at the Narrabri Santos CCC 12 March 2014
Committee Member 1

Question 1

Santos was fined for Aquifer Contamination with the source being from the Bibblewindi Water Storage Facility (no. 3) Dam. The CCC attended this complex in November 2012 and the question was asked as to the integrity of these dams and their ability to perform in all conditions of working stress. The Santos representative informed the committee that the liners were of the best possible quality and that any leak could be detected and the expected life of the liner was 20 years or so. Given all this, and the fact that in the original Sydney Morning Herald release it quotes that “these liners were of poor quality, which resulted in the integrity of the liner being questionable.”

When did Santos realise that the liners were below standard? And did Santos knowingly mislead the committee on that tour and the general public on other tours? And any other presentation where the integrity and safety of the Bibblewindi complex and dams was discussed?

Answer

The Bibblewindi ponds were installed in 2007 by the previous operator Eastern Star Gas (ESG).

Santos acquired ESG in 2011 and all operations in the Pilliga were shut down in December 2011 while a thorough review of all existing sites was conducted.

Upon investigation of the Bibblewindi ponds, we notified the NSW Government of our suspicion that the Bibblewindi pond 3 may be leaking in May 2012 and were instructed by the Environmental Protection Authority (EPA) to conduct further investigation into the matter.

We added 16 additional monitoring bores around the ponds (26 in total), at various depths, to monitor the nature and properties of soils surrounding the ponds as well as measure groundwater level, flows and chemistry.

In March 2013, we notified the EPA that results from routine groundwater sampling around the Bibblewindi ponds showed elevated levels of electrical conductivity and slightly elevated levels of other elements, indicating a leak.

We are currently building ponds on our Leewood property outside the Pilliga with the intention to receive, in its entirety, the full volume of water from Bibblewindi pond 3.

The storage ponds at Leewood are double lined storage ponds with inbuilt systems to monitor the integrity of the ponds and are designed in accordance to the requirements of the NSW Dam Safety Committee (DSC) for dams of Significant Consequence Category.

Question 2

When is Santos going to discuss the new development of 850 wells with the Narrabri CCC and allow a proper briefing on the project and the EIS as will be indicated Santos has done in the consultation section of the EIS document?

Answer

We are currently at the beginning of a rigorous and comprehensive assessment process with both State and Commonwealth governments for the Narrabri Gas Project.

An outline of the Project, also known as request for Director-General's Requirements, is currently being drafted ready to be submitted to the State and Commonwealth Governments for review. Both the State and Commonwealth Governments will consider the assessment and issue its own requirements for Santos to prepare the Environmental Impact Statement (EIS).

When we receive the requirements, Santos will address them in an EIS submitted to both the State and Commonwealth Governments. The EIS will include extensive environmental, cultural heritage and social studies and plans to manage potential effects. We aim to submit the EIS for the Project in the second half of 2014.

We aim to begin the rigorous consultation process with the local community when the request for Director-General's Requirements is submitted.

In addition, to other community consultation already undertaken, Santos briefed the Community Consultative Committee on the Narrabri Gas Project in December 2013 where we provided an overview of the Project focusing on various aspects, but not limited to, our current exploration and appraisal activities in the Pilliga, baseline data gathering and monitoring activities undertaken and proposed gas field operations.

We will continue to engage with the local community and seek input on various aspects of the Project at every step of the assessment process.

For information, please visit www.santos.com/nsw. Factsheets and brochure are also available online.

Question 3

What Santos has brought to the CCC is a very poor project overview without any meat on it. This can hardly be called consultation. This committee represents the community and as such asks questions that the community raises about the project. So far Santos has not provided this committee with any details other than those provided at its presentations in December 2013. If Santos is going to quote that they consulted with the Narrabri CCC committee on the project then it needs to give more details on the EIS on the project. The State Government minister says he is big on community consultation. Santos says and quotes in writing that it also is.

So, where is the more detailed information to allow for proper community consultation by this committee?

Answer

Please see response to Question 6.

Santos is continually engaging with the community on a formal and informal level. We have yet to submit the Project details required to receive the Director-General's Requirements. The Director General's Requirements will then advise Santos the issues which need to be addressed in an EIS for the Project. We haven't even begun the first preliminary stage of assessment for the Project at this stage.

Question 4

Kevin Humphries is on record in a radio interview with 2MaxFM of the 3rd of March 2014 as saying "the EIS will be into the government departments in April 2014." In the MOU, it states the EIS would be in government hands in July 2014.

So which date is correct, as it is now March 2014?

Answer

As stated in the MOU, we aim to submit the Environment Impact Statement to the NSW Government in the second half of 2014.

The MOU between Santos and the NSW Government aims to ensure the assessment of the Narrabri Gas Project is progressed in a timely manner and that Santos meets industry best practice in relation to key environmental safeguards.

There will be no change to either the existing approvals process or New South Wales' stringent regulatory conditions, the MOU just helps to ensure that the NGP will be assessed within timeframes that would enable gas to be delivered when it is most needed.

Response to Questions tabled at the Narrabri Santos CCC 12 March 2014
Committee Member 2

Question 1

What health impact studies has Santos commissioned and/or assessed for and on behalf of their employees or contractors and residents living within a 15km radius of the Leewood ponds?

Answer

Santos places the highest priority on the health and safety of its employees and the communities where it operates and adopts a rigorous risk-based health and safety program which considers the safety of workers and visitors.

The storage ponds at Leewood present no health risk to the community. They are simply structures that store (saline) water prior to treatment. The storage ponds are double lined with inbuilt systems to monitor the integrity of the ponds and are designed in accordance to the requirements of the NSW Dam Safety Committee (DSC) for dams of Significant Consequence Category.

We currently have 7 groundwater monitoring bores around the Leewood ponds, at various depths, to monitor the nature and properties of soils surrounding the ponds as well as measure groundwater level, flows and chemistry.

We have also commenced comprehensive air studies across the Project area and the region, collecting baseline data with the University of Adelaide. Collection of this data will continue during the development and operation of the Project, to ensure real time comparisons to baseline data.

Santos is confident that its CSG operations will not cause adverse health related issues, but we continue to welcome and support rigorous, independent and objective health impact assessment that considers both the potential health impacts of CSG.

Question 2

What are the government requirements (of Santos) and to the public, if you, Santos or a contractor to you or any other legal entity working on a project that involves work on or is connected to the Narrabri Gas Project, decide that there is a need to hydraulically fracture any well or seam within the proposed Narrabri Gas Project?

Answer

Santos has no plans to use hydraulic fracturing in its activities in and around the Pilliga. Geological data has shown that due to the characteristics of the coal seams in the area, hydraulic fracturing would not increase gas flow rates.

If additional geological data supported the use of the technique in the future in the Narrabri area, a range of additional Government approvals would be required and community consultation would be undertaken.

As part of the approvals process each operation is assessed thoroughly and conditions are added to approvals where appropriate to ensure that all precautions necessary are taken to protect the environment.

Hydraulic fracture stimulation is closely regulated by strict government rules. The NSW Government has put in place tough new rules regulating hydraulic fracturing in NSW.

The recently enacted NSW Government's Code of Practice for hydraulic fracture stimulation requires the proponent to:

- Not use BTEX compounds in any fracture stimulation activity;
- Drilling additives must be tested by a National Association of Testing Authorities-certified laboratory and demonstrated to meet Australian drinking water health guidelines;
- Samples of drilling additives and fracture stimulation additives may be taken at any time by the EPA to verify compliance;
- To avoid any impact on water resources and to keep the fractures within the targeted area, each fracture stimulation must include:
 - Identification of the rock types, the condition of aquifers and their distance from the target coal seams;
 - Determination of the faults and stresses in the surrounding geology and the maximum pressure that can safely be applied; and
 - Identification of the intervening strata and their porosity and permeability.
- A risk assessment must be made before each fracture stimulation of the effects on public safety, land contamination, air pollution, noise and vibration, loss of well integrity, induced ground movements or seismicity and conflicts with existing land uses.

Here is a link to the NSW Code of Practice for Coal Seam Gas Fracture Stimulation for more information <https://www.csg.nsw.gov.au/protections/codes-of-practice-hydraulic-fracturing>

These requirements are in addition to the NSW and Commonwealth Government environmental assessment processes which look at the potential environmental impacts in detail and what mitigation measures are proposed.

Question 3

"We won't affect the quality or quantity of water available for other users". Santos has stated the above remark in a local paper. How and why does Santos know the above statement to be true?

Answer

Both Santos' studies and the independently conducted Namoi Catchment Water Study predict the effect of the CSG industry on groundwater will be negligible.

The water we extract from the coal seams during our operations does not come from the Great Artesian Basin and is not the water used by agricultural users and the community. It comes from much further underground (500 – 1000m below the surface).

Between these coal seams and the shallow aquifers accessed by farmers and the community lie hundreds of metres of rock layers through which water cannot pass. These impermeable layers effectively ensure the saline water from deep in the coal seams cannot reach the shallow aquifers.

The water extracted is too salty for reuse unless desalinated. We estimate that, after treatment, about 80% of the water will be able to be reused and provide additional water that would otherwise not have been accessible.

When drilling, we work to ensure gas is produced safely and the groundwater is protected.

Drilling standards are also codified within the NSW Code of Practice for Coal Seam Gas – Well Integrity, issued in September 2012. The Code establishes a best practice framework for the design,

construction and maintenance of a well, has undergone expert peer-review coordinated by the New South Wales Chief Scientist and Engineer.

All Santos CSG wells are designed to ensure they are safe and environmentally sound and prevent any interconnection between hydrocarbon bearing formations and aquifers and to ensure that gas is contained within the well and associated pipework and equipment without leaking.

To achieve this, a completed production well will consist of layers of steel pipe and cement. These steel pipes and cement layers serve to maintain the well opening, isolate the coal seams from the overlying geologic formations and aquifers, and provide a conduit for fluids to flow from the formation to the ground surface.

The drilling mud which is circulated up and down the hole as drilling takes place is water based and contains no dangerous or toxic chemicals. Below the aquifers, the largest component of the drilling fluid chemicals will be potassium-sulphate which is commonly used as a fertiliser.

As a matter of good industry practice, Santos will record the environment into which the well is drilled, the well construction details, and maintenance work undertaken on a well for its entire lifecycle through to its decommissioning and rehabilitation. This information is used to achieve well design objectives, optimise future well design, and provide a record of adherence to best practices and compliance with the Well Integrity Code of Practice.

Santos has gained a thorough understanding of groundwater in the region, by developing an extensive regional groundwater model that simulates groundwater flow and predicts groundwater drawdown. This model is based on extensive databases built from years of geological investigations and is regularly reviewed as new water monitoring data is available.

In addition to monitoring our gas wells, Santos is establishing a network of deep and shallow aquifer monitoring bores throughout its work area. These will improve the understanding of the hydrogeology of the area, the natural variability in water levels, and provide high resolution continuous monitoring for baseline and also monitoring for the unlikely potential impacts of development activities.

Santos has also developed a Water Portal for NSW which provides data of water monitoring and is available here <http://www.santoswaterportal.com.au>

Question 4

A Freedom of Information request had to be used to obtain the information with regard to the leakage of the Narrabri Bibblewindi water storage ponds, the timeframe and results. Santos has kept this information from the general public, with regard to many mitigating factors including the 20 times above safe drinking levels of uranium, as such, will Santos now admit they have misled and given false statements when your advertising in the North West magazine March the 3rd 2014 clearly states "We won't hide any of our activities" etc?

Answer

It is important to highlight that Santos 'self-notified' a suspected issue with the Bibblewindi pond to the NSW Government in May 2012.

Santos then fully cooperated with the Environment Protection Authority (EPA) in undertaking its investigations into the matter.

Upon completion of their investigation, the EPA issued a media release on 18 February 2014 outlining the nature of the penalty. Copy of the media release is available here <http://www.epa.nsw.gov.au/epamedia/EPAMedia14021802.htm>

It is important to note that it would have been inappropriate for Santos to make many public statements until such time the EPA had finalised its investigation.

There was, however, a report of the elevated levels in a front page story of the Narrabri Courier on 29th August last year when construction at the Leewood facility commenced. <http://www.thecourier.net.au/news-feed/item/1588-work-begins-on-19m-water-treatment-plant>

The NSW Government has published a factsheet on the matter and it is available here http://www.csg.nsw.gov.au/_data/assets/pdf_file/0018/41535/FactSheet.pdf



Questions and Answers on Pilliga Pond Incident

13 March 2014

On 18 February 2014 the NSW Environment Protection Authority (EPA) announced it had fined Santos for a pollution incident at a pond which is part of its Narrabri Gas Fields operations in the Pilliga. The EPA media release is here:

<http://www.epa.nsw.gov.au/epamedia/EPAMedia14021802.htm>

The EPA's report on the incident is available on request.

This brief Q&A document has been jointly produced by the Department of Premier and Cabinet, the Department of Trade and Investment, the EPA, the NSW Office of Water (NOW) and the Division of Resources & Energy (DRE). It is designed to help people understand what has happened and to address any queries they may have.

1. Who is responsible for the incident?

The pond is called the Bibblewindi Pond 3 and was installed by Eastern Star Gas (ESG) in 2007. It is part of the Bibblewindi Water Treatment Facility established by ESG to treat produced water from pilot wells it operated. Santos acquired ESG in 2011 so it has taken on responsibility for (and any liability for) its facilities there.

2. When was the government notified and what was done by government?

Santos notified the government in May 2012 that it suspected the pond may be leaking. Santos was instructed to undertake assessment to determine if the pond was leaking and to what extent.

Further studies and monitoring were undertaken by Santos between May 2012 and April 2013 in consultation with DRE. These studies revealed that the leak was small and hard to detect. Santos installed 8 additional groundwater monitoring bores during this period to confirm the results.

Details of Santos' surveys and monitoring that confirmed the existence of a leak, its extent and impact were provided to government in March 2013. The EPA immediately commenced a formal investigation.

3. What did the EPA investigation find?

The EPA investigation confirmed that the liner in Pond 3 was leaking. The liner had not performed adequately and water had leaked to a groundwater system at a depth of between 22m and 33m. The leak was not caused by any drilling or other resource extraction related activity.

The EPA investigation found elevated salt levels in the groundwater between depths of 20m and 33m and elevated concentrations of Aluminium, Arsenic, Barium, Boron, Lead, Nickel, Strontium and Uranium. These are all naturally occurring elements in the surrounding soil and groundwater. Importantly, testing did not detect Uranium in the pond's water. However, Uranium was detected in the natural soils on the site. This indicates that the naturally occurring Uranium in the soil is the source of the elevated concentrations of Uranium in the groundwater. It is suspected that the leaking water mobilised the elements and moved them into the groundwater.

4. How close is the pond to other water sources?

The NSW Office of Water confirmed the shallow groundwater site is more than 5 km away from the nearest drinking water bore. The nearest stock and domestic bore is 4km away and is extracting water at a depth of between 60 and 84 metres.

5. Is my stock or my crops in any danger?

No. There is no danger to stock or crops in the area.

The leak is small, localised and contained, and it is extremely unlikely that the impacted groundwater will migrate beyond the confines of the localised groundwater system within the immediate vicinity of the pond. Water within this groundwater system is barely moving. Therefore there is no risk to private bores.

6. What is an aquifer?

An aquifer is any geological structure or formation, or an artificial landfill that is permeated with water or is capable of being permeated with water. This includes water of non-drinking water quality and that may even be saline.

More generally, the term 'aquifer' is commonly understood to mean a groundwater system that is sufficiently permeable to allow water to move within it, and which can yield productive volumes of groundwater. Groundwater is all water that occurs beneath the ground surface in the saturated zone.

7. Is the aquifer affected by the leak connected to any other aquifers, especially those which supply water for irrigation, livestock or human consumption?

No. Equally, there is no evidence that this groundwater system is connected to other deeper aquifers (for instance the Pilliga Sandstone).

8. How did the EPA determine that there was little or no risk to environment and health?

The leak is small, localised and contained, and the groundwater is barely moving. It is more than 4km to the nearest private stock and domestic water source and more than 5km from the nearest drinking water source. Therefore there is no such risk as there are no exposure pathways.

9. What regulatory action was taken?

The EPA fined Santos \$1,500 for the incident. The fine imposed on Santos reflected the small environmental impact of the incident, the fact that the company self-reported the incident, cooperated in the investigation and is implementing measures to minimise the impact.

10. Could this happen again?

The NSW Government has significantly strengthened the regulatory controls that apply to CSG operations in NSW to prevent this kind of incident occurring again.

Companies are now required to be licensed by the EPA for environmental matters as well as the Office of Coal Seam Gas for engineering and operational matters. Companies must also now have in place an approved Produced Water Management Plan prepared in consultation with the EPA and NSW Office of Water.

The NSW Government has also banned the use of evaporation ponds.

11. What will happen now and will the site be rehabilitated?

Santos' Environment Protection Licence will include a number of requirements and comprehensive rehabilitation will be carried out. Pond 3 will be fully decommissioned once leaked water has been monitored and pumped back to the pond. The water from the pond will be transferred to a new, approved water treatment facility "Leewood" being constructed by Santos. The new facility has double lined membranes with leakage detection and collection systems. Monitoring and acting on the groundwater will continue until levels return to background/ambient levels.

It is estimated that Santos will spend more than \$10m to rehabilitate the Bibblewindi site.

12. What overall regulatory controls has the government put in place?

The NSW Government has the most comprehensive measures in the country for the regulation of coal seam gas.

Any petroleum exploration or assessment licence granted in NSW has conditions that require the development of a Groundwater Modelling and Monitoring Plan in consultation with the NSW Office of Water and a Produced Water Management Plan in consultation with the EPA and NSW Office of Water.

The government has made the EPA the lead environmental regulator of coal seam gas activities in NSW with responsibility for compliance and enforcement.

The government has also put in place a range of protections including an Aquifer Interference Policy and a Code of Practice for Well Integrity to protect groundwater, banned the use of BTEX chemicals, and banned the use of evaporation ponds.

The NSW Government has also put in place a Land and Water Commissioner to provide independent advice to the community.

13. Who do I contact if I have any queries or concerns?

Phone the EPA's Environment Line on: 131 555;
or email: info@environment.nsw.gov.au

or

Phone the Office of the NSW Land and Water Commissioner on:
(02) 6391 3429;
or email:
commissioner@landandwater.nsw.gov.au

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (March 2014). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the NSW Department of Trade and Investment, Regional Infrastructure and Services or the user's independent advisor.

Information Request Response

Reference:	140212NCCC
Subject:	Information Request Items Narrabri CCC
Request date:	12 February 2014
Requested by:	Member Tony Pickard through David Ross, Chair, Narrabri CCC
Background Request:	<p>Questions tabled to guest presenter from Energy Australia</p> <p>Item 1: Questions tabled at meeting –</p> <div style="border: 1px solid black; padding: 10px;"> <p>I ask these questions in light of the second presentation tonight.</p> <p>Social Impact Assessment – component.</p> <p>“In light of recent media reporting – namely the SMH of February 10, 2014, where the Queensland power generation company Stanwell is mothballing one of its Queensland CSG powered power stations and returning to coal.</p> <p>They are also reported to be considering selling their contracted gas back to the CSG companies at higher prices to help these companies ensure that the Contractual Arrangement for overseas sale of CSG is met.”</p> <p>Question: Will Energy Australia be considering such a move with its Contracted Gas Supplies and divert the gas that is meant for the supply of cheaper/greener electricity generation in NSW away to the more lucrative overseas market?</p> <p>Or</p> <p>Question: Will Energy Australia give a guarantee that all the CSG contracted for power generation in NSW from the NSW source be used exclusively for power generation in its NSW power stations for the life of the Narrabri Gas project no matter who may own that project, thus ensuring a cheaper and cleaner power supply to NSW?</p> <p>I do not expect the presenter to answer these questions tonight; however, I do expect an answer, after all, these reasons given above is what Santos is basing its NSW operation on.</p> </div>

	<p>Item 2: Questions added by member after the meeting –</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>① When the Power Stations are 'on-line' what are the Nitrous-Oxide readings on both Coal and Gas. (NSW Stations ONLY)</p> <p>② - Calorific Value of Coal & Gas. Consumption of gas & Coal per kg Steam generated.</p> <p>③ - Gas Consumption of Boilers on Standby - not generating Steam.</p> <p>④ - More Information re HALLET in S.A. - Type of unit - Wm Hwt etc.</p> </div>
<p>Response from Energy Australia:</p>	<p>Item 1</p> <p>Question 1 - Will EnergyAustralia be considering such a move with its Contracted Gas Supplies and divert the gas that is meant for the supply of cheaper/greener electricity generation within NSW away to the more lucrative overseas market if the opportunity presents itself?</p> <p>Response:</p> <ul style="list-style-type: none"> • EnergyAustralia has a portfolio of gas contracts used to supply mass market customers, business and wholesale customers and power generation across the eastern Australian States of New South Wales, Victoria, South Australia and Queensland. • Gas we purchase from Narrabri will be used to supply the needs of our customers and our power generation. <p>Question 2 - Will EnergyAustralia give a guarantee that all the CSG contracted for power generation in NSW from the NSW source be used exclusively for power generation in its NSW power stations for the life of the Narrabri gas project no matter who may own the project, thus ensuring a cheaper and cleaner power supply to NSW?</p> <p>Response:</p> <ul style="list-style-type: none"> • As stated above gas purchased from Narrabri will be used to meet our portfolio of customers and power generation.
	<p>Item 2</p> <ul style="list-style-type: none"> • If in the future, EnergyAustralia has one of its power generation technical experts come to Narrabri, we are happy to meet Mr Pickard to further discuss his hand written questions on coal and gas fired power plants.

SANTOS UPDATE – March 2014

Proposed upcoming work program – Narrabri Area

Time frames are indicative as schedules are dependent on factors such as approval times, weather and rig availability.

Decommissioning of wells:

- There are no plug and abandon activities planned for March

Workovers:

- A workover program will commence at the end of March 2014 with activity planned for Dewhurst 22 to Dewhurst 25 and Dewhurst 6 well sites
- The workover rig is used to install and/or maintain pumps on existing wells

Drilling of exploration core holes:

- There are no core hole activities planned for March

Pilot wells:

- Drilling continues on the Dewhurst 26 – 29 well sets
- Rig will be drilling at Dewhurst 27 throughout March

Leewood

- Leewood civil works complete waiting on final trim for liner installation
- Cell one liner installation continues, delayed slightly due to wet weather
- Cell one temporary pumps and inlet manifolds installation underway
- The Bibblewindi to Leewood flowline is commissioned and ready for service

Pilliga rehabilitation:

- Irrigation continues as part of the rehabilitation of the Bohena and Bibblewindi sites in the Pilliga

Other work:

- Pre-commissioning work at the Bibblewindi water transfer station is complete
- Tintsville pilot remains on-line
- Bibblewindi West pilot has been brought on-line
- Partial rehabilitation of recently drilled Dewhurst sites is progressing as drilling is completed at each site
- Work continues on the Dewhurst Northern and Southern flowlines

Site visits:

- The Community Site Tour scheduled for 20 February was cancelled due to wet weather
- The next scheduled community site visit will take place on 20 March. If you are interested in attending or would like more information, please call Lesley Anderson on 6792 9035 or email lesley.anderson@santos.com

Community:

- Santos has sponsored Nosh on the Namoi and the Narrabri Blue Boars 50th Anniversary event
- Santos' organised a Clean Up Australia Day initiative on Sunday March 2 with community volunteers and Santos staff assisting in clean up at Cameron Reserve and Narrabri Lake
- Welcome to Angela Smith who has joined us as a cadet in the Community Engagement team

Other:

- Intermittent protest action in operational areas
- The next meeting of the Santos Community Committee on CSG for the Narrabri Shire will be held on Tuesday March 12
- The Commonwealth House of Representatives Environment Committee will conduct an inquiry into streamlining environmental regulation, 'green tape', and one stop shops for environmental assessments and approvals. Submission period closes on Friday 11 April, 2014. Terms of reference and additional information can be found at:
http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=environment/greentape/index.htm