

MEETING MINUTES



MINUTES OF: AIFL Committee Meeting
 HELD AT: Dalby, BMO Centre
 DATE: 24 September 2015
 COMMENCEMENT TIME: 9.40am

PRESENT:	David Munro, Chris Wicks, Stewart Hayllor, Brydie Hedges, Richard McLean, Jamie Grant, Ian Valler, Steve Hanlon, David Wolf
	Apologies: Stuart Armitage, Jeff Bidstrup, Neville Wirth
CHAIRMAN:	David Munro (acting)
DISCLOSURES	

		ACTION
ITEM 1 Joint SRG	Welcome to joint session with Surat Reference Group	
ITEM 2 Joint SRG	Safety Moment – Information on the Drug Ice by Kate Sullivan	
ITEM 3 Joint SRG	Development Update on Daandine Expansion Project	
	<p>Dave Munro provided an update on the DDEXP works.</p> <ul style="list-style-type: none"> Expansion provides an increase in Daandine production capacity. Recent facility shutdown was to make safety upgrades and pre-install compressor tie-ins. Short term in-field flaring was conducted. Wells turned down to a minimum rate – avoiding full shut in because wells will load up with water and will be slow to recover. Notification to all neighbours in the area was undertaken to ensure community understanding of works being done. Commissioning of the new compressors is expected to be conducted at the end of the year. <u>Questions</u> - John Hughes asked if the end of year shut down would involve flaring and how much water will load the wells? 	
	<p>Answer to question</p> <p><i>How much water will load wells? Wells behave differently depending on how long they are shut down for, how well the coal has been dewatered around them and how productive the coal is. We monitor each well to understand its behaviour. It can take from a few hours for a well to recover from a short shut in to several weeks to recover from a long one.</i></p> <p><i>End of the year flaring? Commissioning of the new Daandine compressors and wellfield gas ramp up from now through the end of the year will involve intermittent flaring at the main gas plant. This is not a full shut down of the Daandine field and is not planned to involve 'in-field' flaring, away from the gas plant. Arrow will continue to keep the nearby community informed.</i></p>	
ITEM 4 Joint SRG	Water Science	
	<p>Lone Pine interconnectivity results</p> <p>Simon Gossmann provided an overview of the results of the study undertaken at Lone Pine near Nangwee on the Toowoomba – Cecil Plains Road to assess the connectivity between the Walloon Coal Measures and the Condamine Alluvium.</p> <ul style="list-style-type: none"> The study contributes to the Condamine Interconnectivity Research Project (CIRO), part of a wider program of investigations into connectivity lead by the Office of Ground Water Impact Assessment (OGIA). Obtains data to improve OGIA's Surat Basin CMA Ground Water Model. Continuous core was collected of the Condamine Alluvium to the Walloon Coal Measures. Open Day was held on site in 2014 to show the core that was collected for laboratory testing of permeability. 	

	<ul style="list-style-type: none">• The study allowed Arrow to demonstrate practical coexistence through:<ul style="list-style-type: none">• The use of bog mats to protect cultivation and to limit the impact on black soils.• Successful landholder negotiation to minimise impact<ul style="list-style-type: none">- Timing i.e. when was water available and normal farming activities not going to be disrupted- Siting of bores to best minimise impact and to get the necessary data• Four bores were drilled and three completed for monitoring. <p>Overview of Daandine and Lone Pine Results –</p> <ul style="list-style-type: none">• There is a low level of regional connectivity between the Condamine Alluvium and the Walloon Coal Measures.• Walloon Coal Measures response to pumping in Condamine Alluvium did not indicate a strong hydraulic connection between the two systems.• Vertical hydraulic permeability values determined from this study will be used as part of OGIA’s construction of the new regional groundwater model.• Geoff Hewitt asked if the results between Daleglade and Lone Pine were similar. Simon advised that the geology was less permeable than Daleglade (which showed low connectivity).• Geoff Hewitt noted the effect of nearby pumping (from nearby bores) was interesting and asked how confident Arrow was that the results are across many bores. Simon advised that it was part of the work that OGIA were undertaking.	
ITEM 5 Joint SRG	Research and Innovation	
	<p>Condamine Alliance lunker installation project</p> <ul style="list-style-type: none">• Arrow has had a partnership with Condamine Alliance for 2 years. The partnership is the largest corporate investment in the Condamine catchment, securing the future of the Dewfish Demonstration Reach.• The partnership is delivering a program of works that includes:<ul style="list-style-type: none">• Irrigation screens• Small fish habitat restoration• Maintaining fish passage• Pest management• Landscape permeability• Restoration of urban waterways.• Arrow Energy in partnership with Condamine Alliance as part of the Dewfish Demonstration Reach project, constructed Lunkers for installation in the Myall Creek. Lunkers (little underwater neighbourhood keepers) are structures installed in streams to provide fish habitat while also helping to stabilise the bank. <p>Soil Characterisation Research</p> <ul style="list-style-type: none">• In 2014, Arrow engaged with QUT to assess the potential long-term impacts on agricultural soil from irrigating with treated and blended CSG water.• The research was undertaken using three soil types on Arrow’s Theten demonstration farm at Dalby.• The soil analysis is important because it sets up the basis for effective water management (e.g. through land irrigation using treated or blended CSG water).• This research showed that irrigation of agricultural soils with treated / blended CSG water is possible without damaging agricultural soils.• Research for soil column testing is now being expanded to examine two further properties – Arrow’s Broadwater farm and a call for expressions of interest for a second local farm was made. Discussions would be undertaken with those landholders from the committee who expressed an interest in having this research conducted on their property.	

ITEM 6	Update on Arrow membership of the IFL committee	
	<p>Two Arrow members of the IFL Committee, Mike Ward and Darren Holmes, have moved to new position within Shell as part of the normal secondee 3-4 year rotation. As a result their positions on the IFL Committee will need to be filled. At this time their replacements have not been appointed within Arrow. Once this is finalised Arrow will forward nominations to the full committee by email for endorsement before the next meeting.</p> <p>Arrow also proposed that Brydie Hedges join the IFL committee as an Arrow representative. Membership was endorsed by JG and SH.</p>	
ITEM 7	Minutes Of Previous Meeting	
	<p>The minutes of the previous meeting had been sent to members and were approved as a true record,</p>	
ITEM 8	Information on Planned Seismic project	
	<p>David Munro presented Arrow's plan to undertake seismic in the Tipton and Cecil Plains areas from January 2016.</p> <ul style="list-style-type: none"> • The survey will consist of 117km of 2D seismic along gazetted roads round Cecil Plains. • Survey to be undertaken to map the Horrane Fault, to provide more certainty on the fault's location and characteristics. The Horrane Fault is a small fault in geological terms. • The information provided through survey results will enable Arrow to analyse how the fault intersects with the Walloon Coal Measures. • The information gathered will de-risk geological uncertainties to provide the ability for better decision making and therefore prevent unnecessary exploration drilling activities. • A seismic survey is a geophysical acquisition technique used to gather detailed images of the rock formations below the earth's surface. • Seismic waves are created by a vibrating pad that is mounted on a truck or buggy. • The pad vibrates along the ground and the seismic waves are propagated through the ground which reflect underground rock layers. • The seismic waves are picked up by small, highly receptive microphones, called geophones and the data analysed. • Noise is similar to a vehicle with the works taking approximately 10 days and within daylight hours. • A communications plan was being developed that would inform the wider community and neighbouring landholders closer to the planned schedule. 	<p>Chris Wicks to provide the presentation to IFL members.</p>
ITEM 9	Regional Planning – update by Chris Wicks	
	<p>Regional Planning Interests Act – Arrow's approach</p> <p>For current work -</p> <ul style="list-style-type: none"> • Arrow has not had to negotiate the Regional Planning Act yet relying on: <ul style="list-style-type: none"> • s24 exemption (approvals in place as at 12 June 2014) • s22 (agreement with landholders) and • s99 (pre-January 2012 approvals) <p>For new development Arrow will –</p> <ul style="list-style-type: none"> • Focus on reaching agreement with landholders (as was the intent of the legislation) to qualify for the s22 exemption • Up front planning and agreements (through AWP) with landholders to allow certainty 	
ITEM 10	Drilling Update – by Richard McLean	
	<ul style="list-style-type: none"> • Follow on from feedback received during AWP where landholders suggested AE look at drilling wells in corner of ring tanks etc. • Examples of recent water bores drilled in bespoke spaces on Theten/Daandine • General discussion around standard site layout and how drilling in different spaces required bespoke site layouts; some of the challenges of drilling in non-standard spaces 	
	<ul style="list-style-type: none"> • Arrow is looking into the spreading of drilling materials on pads to reduce road cartage if there are no environmental or soil quality issues. A program of testing material and trialling the technique has been undertaken to develop the method. 	

	<ul style="list-style-type: none">The committee requested more information on the drill material spreading at a future IFL meeting.	
ITEM 11	Any Other Business	
	Landholders were asked if anyone could see the Daandine flare – JG and SH can both see a flare. Said it wasn't a concern for anyone they'd spoken to. AE asked if they had any feedback on the engagement carried out beforehand i.e. mail out and advert. Both said they had seen the notifications and were comfortable with how it had been managed.	
ITEM 12	Next Meeting	
	<ul style="list-style-type: none">The next meeting is scheduled for December.	

There being no further business, the meeting was closed at 12.00 pm.

CONFIRMED AS A TRUE AND CORRECT RECORD.

Chairman _____