

MEETING MINUTES



MINUTES OF: Arrow Surat Community Reference Group
 HELD AT: USQ Toowoomba
 DATE: 13 June 2013
 COMMENCEMENT TIME: 9:30am

PRESENT:	ATTENDEES: Tony Knight – Vice President Exploration, Arrow Energy Sarah Delahunty – Senior Community Officer, Arrow Energy David Hamilton – Chair, Basin Sustainability Alliance Geoff Hewitt - Landholder Cr. Ray Jamieson – Councillor, Western Downs Regional Council Cr Charlene Hall - Councillor, Western Downs Regional Council John Hughes –CSG Compliance DNRM Matt Paull - APPEA John Stone – Manager – Agriculture , Arrow Energy Michael Barker –Team Leader Landholder Bores , Arrow Energy Stephen Denner - Team Leader Hydrogeology, Arrow Energy
	MINUTES: Sarah Delahunty (Secretary)
	APOLOGIES: Leisa Elder (Arrow), Jordan Peach (ALFA), Anna Stephenson (USQ), Sarah Due (Agforce), Marie-Louise Offner (Cotton Australia), Ian Hayllor (landholder), Nancy Sommerfield (TRC) Carolyn Collins (Arrow).
CHAIR:	Tony Knight – Vice President Exploration
DISCLOSURES	None recorded

		ACTION/SUGGESTIONS
ITEM 1	SAFETY MOMENT	
	David Hamilton presented safety moment showing areas for potential harm when on a farm – including quad bikes and machinery. Commented the approach to safety taken by resource companies was something that landholders should learn from.	
ITEM 2	Minutes of previous meeting	
	Minutes were passed and agreed.	1. SD will add Minutes to the Arrow web site
ITEM 3	Update of Actions	
	<i>Points of discussions from previous minutes:</i> <ol style="list-style-type: none"> <i>Sarah Delahunty to organise tour of Theten farm for BSA members. Completed. DH thanked Arrow for tour and would like to organise another for BSA members that could not attend.</i> <i>Suggestion to get key agricultural groups such as AgForce, Cotton Australia and Department of Primary Industries involved in Arrow's irrigation project.at Theten.</i> <i>Bill Date will give a briefing to Arrow staff on key concerns raised to Government [around major pipeline construction by other proponents]. Completed. A presentation was delivered by Bill Date to relevant Arrow staff. Subsequent question raised around minimum distances from houses etc for pipeline and gathering lines. This will become a new action, to be reported on before or at next meeting by TK.</i> <i>Suggestion to gather information from landholders in Arrow tenure along the Condamine about incidents of gas bubbles being seen. A series of investigations into gas migration and release are underway, both independently and jointly by Government and industry. In particular,</i> 	<ol style="list-style-type: none"> TK will present information on exclusions zones around pipelines, and item to be added to the next agenda. TK to present an update on how Lake Broadwater is considered in Arrow's management processes (e.g EIS, EMP)

	<p>Origin Energy is investigating the Condamine gas bubbling. As an adjunct to discussion about waterways and lakes, Cr Hall raised concern over Lake Broadwater and its catchment area. This discussion triggers a new action for Arrow to respond to how it protects and manages impacts on Lake Broadwater. Note that in preliminary discussions, TK clarified that Lake Broadwater is a specific exclusion from Arrow tenure.</p> <p>5. Sarah Delahunty will provide a list of actions that have been raised and closed out through ASCRG. Completed</p> <p>6. Sarah Delahunty will look into speeding concerns [along Broadwater Road]. Completed.</p>	<p>etc).</p>
<p>ITEM 4</p>	<p>Presentations delivered to joint assembly of the ASCRG and AIFLC</p>	
	<p>Research Projects</p>	<p>Colin Whyte (AIFLC)</p>
	<p>Key research areas undertaken or supported by Arrow</p> <ul style="list-style-type: none"> • Centre for Coal Seam Gas, which forms part of the Sustainable Minerals Institute of the University of Queensland. Conducts research into four key areas: <ul style="list-style-type: none"> ○ Hydrology ○ Geoscience ○ Petroleum Engineering ○ Social performance and community impact • Organic Compound Research – Queensland University of Technology, investigating geochemistry and potential for leaching of organic compounds from produced groundwater. • Endangered species study – conducted by Worley Parsons, to develop management plans for potentially impacted endangered species within Arrow's development areas. • Overland Flow / Area Wide Planning – in association with Condamine Alliance • Erosion and rehabilitation trial – by SEEC Consultants to investigate and develop appropriate erosion and sediment control measures across different land types. • Joint industry investigation into gas migration – CSIRO commissioned by APPEA to investigate gas migration in the Surat Basin. • Composting trial (planned) – to investigate use of drill cuttings combined with other waste streams (esp. green waste) to use as fertiliser. Cr Hall asked that Arrow include WDRC in their considerations of waste usage, as Council has various waste streams (e.g green and sewage) available and there is opportunity to achieve a mutually beneficial outcome. • Greenhouse gas emissions, various areas of investigation, e.g CCSG, APPEA, Commonwealth (see attached media release from MP Greg Combet, 16 April, 2013) • Beneficial use of CSG water, additional works under consideration in association with USQ. Discussion on this topic covered: <ul style="list-style-type: none"> ○ How long will the project run? CW answered at least 12 months. ○ Will data be made publicly available? Arrow has confirmed its in-principle support for sharing data publicly, and is working on the means to enact it, which faces some technical challenges (e.g how to show live data etc). 	<p>4. CW will report back on request to make soil testing results available</p>

	<ul style="list-style-type: none"> Threatened flora species <p>The following points were discussed and noted:</p> <ul style="list-style-type: none"> Soil testing with USQ will potentially last for 12 months Theten soil testing results available. 	
	<p>Theten Update</p>	<p>John Stone</p>
	<p>Key points</p> <ul style="list-style-type: none"> History of Theten Current farm set-up (infrastructure types and capacities) Summer/winter crop yields Soil and water testing Forward plan for farming activities <p>The following points were discussed and noted:</p> <ul style="list-style-type: none"> There is currently no current gas infrastructure situated within irrigated areas of Theten. This is part of a phased approach, where the first objective is to demonstrate that treated CSG water can be used successfully for irrigation. Subsequent phases will trial other aspects of co-existence between CSG and farming, including well design and location matters. General discussion around the objectives of Theten, e.g is it to demonstrate commercial production, or to demonstrate sustainable irrigation using treated CSG water, and over what time frames trials will run, are different soil types being tested etc. An action was taken to provide a more comprehensive overview of the strategy and objectives of Arrow's farming demonstrations. Public access to data collected on the farm. Questions around the types and frequency of data collected, how data are interpreted and reported, peer review mechanisms Depth of soil testing, reflecting discussion around whether Arrow's application of water for irrigation is causing deep drainage. Whether use of water on Theten is a 'new' use, and would it be given preference in the event of a shortfall elsewhere. TK answered that the primary purpose of Theten is for demonstration, and in the event of competing needs (e.g substitution of allocation) that Theten would not take priority, or to represent an ongoing "new-use" of water. The amount of water applied per Ha was discussed, and questioned as to whether the amount (8-9ML/Ha) could possibly bias yield results. This matter will be addressed in a future presentation on the strategy and objectives of Theten farm. 	<p>5. TK will look at how data from Theten can be represented so that it can be peer reviewed</p> <p>6. JS will present information on the stage of the Theten BU trial and future plans at next meeting.</p>
	<p>Land access compensation framework</p>	<p>Rod Williams (AIFLC)</p>
	<p>Key points:</p> <ul style="list-style-type: none"> Arrow's revised Land Compensation framework was presented, explain the logic and components used to calculate compensation amounts. Compensatable elements are based on Land Value, and include disturbance, landholder time, construction/development intensity, <p>The following points were discussed and noted:</p> <ul style="list-style-type: none"> Pipeline easement compensation continues after rehabilitation has taken place CPI is included in the compensation agreements as an escalation factor for enduring infrastructure (i.e more than 1 year life). Question raised around possible legal constraints (trespass)that might be invoked by directional drilling under the boundary of neighbouring property not subject to a compensation agreement Comment made that CSG infrastructure has potential impact on value of property at sale. Arrow responded that it had no real evidence of this issue, and also that it may be temporary and reflect current perceptions of the industry which may change over time.GH made comment that Arrow needs to be cognisant of the importance of maintaining farm asset values, as these are clearly of utmost importance to landowners, and that the fundamental premise is they cannot be reduced. 	<p>7. TK will clarify legal limitations on directional drilling close to property boundary.</p>

	<p>Water update</p> <p>Key points presented on connectivity and bore assessments work:</p> <ul style="list-style-type: none"> • Collaboration with Office of Groundwater Impact Assessment (OGIA) to coordinate and oversee a number of the components of the project. • Project was proposed as future research in the Surat Underground Water Impact Report (UWIR). • Stratheden and Daandine are the two current study areas • Baseline assessments on quality and quantity of water supply, including details of bore construction etc. • Results of the project will be incorporated in the revised OGIA model in 2014 and subsequently reported in the new Surat Cumulative Management Area UWIR. <p>The following points were discussed and noted:</p> <ul style="list-style-type: none"> • DH enquired around Arrow's intentions to plug and abandon 'Impacted water bores' (as defined by the OGIA list of identified bores) which may produce gas. TK answered that they are dealt with on a case by case basis, and with consideration to safety aspects together with water supply requirements (i.e whether ongoing use is required etc) • On the topic of gas migration, there are various studies going on by both industry and Government, and looking at both natural and induced gas release (e.g due to fugitive emissions from wells or pipeline infrastructure etc) • Question around where Make Good agreements include both quantity and quality. Make good' agreements can be amended by agreement if circumstances or predictions change. Data from the baseline bore assessments is provided to the relevant landholder and submitted to OGIA as required under the Water Act. 	<p>Michael Barker/ Stephen Denner</p> <p>8. CC will show information on how quality of water is also tested and addressed in assessments of landholder bores and Make Good Agreements.</p>
ITEM 5	<p>Basin Sustainability Alliance</p> <p>Key points presented:</p> <ul style="list-style-type: none"> • BSA not opposed to CSG but sustainability of both industries is essential • A list of key issues of concern to BSA was presented: <ul style="list-style-type: none"> ○ Perceived power imbalance – landholder v's company ○ EIS process credibility (after Four Corners expose) ○ That water must be treated as a resource ○ Lingering concerns around Make Good workability ○ Salt disposal ○ Social licence – particularly in terms of truth in advertising ○ SKM report ○ Transparency and trust. <p>The following points were discussed and noted:</p> <ul style="list-style-type: none"> • EIS document needs to find a balance between covering all issues and a document that is digestible to read. • SKM report that was commissioned by state government has not been well received by any of the participants in the report. 	<p>David Hamilton</p>
ITEM 6	<p>Community Support</p> <p>The following update was presented:</p> <ul style="list-style-type: none"> • Launch of the Arrow Reconciliation Action Plan (RAP) <p>The following points were discussed and noted:</p> <ul style="list-style-type: none"> • Action plan puts into place assistance without having 'reverse discrimination' outcomes. 	<p>Tony Knight</p>
ITEM 7	<p>Any other business</p> <ul style="list-style-type: none"> • CH -would like an update on local benefits arising from Arrow Surat operations – employment, business opportunities and involvement, local investment, community activity • DH - would like an update in a month how Arrow is progressing with the Actions taken from each meeting 	<p>9. SD to provide update on actions by mid July</p>

	<ul style="list-style-type: none">• RJ – look at meeting times to ensure that we have good attendance• GC – would like the Darling Downs regional plan added to the next agenda	10. SD will add regional plan to August agenda
ITEM 9	NEXT MEETING	
	Thursday 12 September 2013	
ITEM 10	CLOSE	
	1 pm	

There being no further business, the meeting was closed at 1:00pm

CONFIRMED AS A TRUE AND CORRECT RECORD.

Chairman