

MEETING MINUTES



MINUTES OF: AIFL Committee Meeting
 HELD AT: Dalby RSL
 DATE: 11 October 2012
 COMMENCEMENT TIME: 9.30am

PRESENT:	Darren Holmes, Chris Wicks; Wayne Newton, Paul McVeigh, Jamie Grant, Carey Bradford; Stuart Armitage; Rodney Williams; Jamie Grant; Frances Kinman,
	MINUTES: Frances Kinman
	APOLOGIES: Jeff Bidstrup, Mike Ward, Steve Hanlon, Gerard Coggan, Andrew Thompson
CHAIRMAN:	Darren Holmes
DISCLOSURES	

		ACTION
ITEM 1	Safety Moment	
	Frances Kinman presented an update on the rescue Helicopter based in Roma and funded by the CSG proponents, including Arrow.	
ITEM 2	Minutes Of Previous Meeting	
	The minutes from the previous meeting of 9 August 2012 were accepted and approved.	
ITEM 3	Nomination of New Member	
	Nomination of new committee member – Chris Barry. Nominated Jeff Bidstrup (prior to meeting) and seconded Paul McVeigh, elected.	
ITEM 4 JOINT ASCRG	Project Update	
	Simon Gossmann – Presentation delivered to joint assembly of the ASCRG and AIFLC outlining Arrow’s work on groundwater, substitution of allocation and pipelines. Key points: <ul style="list-style-type: none"> • 213 Baseline Assessments completed • In consultation with independent experts, Arrow has developed a draft bore assessment methodology tool. • Developing groundwater monitoring strategy for Condamine alluvium. • Arrow proposing up to 50 bores for monitoring Condamine alluvium • Arrow undertaking a detailed investigation of hydraulic connection between alluvium underlying coal measures. • Developing a commercial agreement for water off-take in line with individual negotiations and in relations to the access and compensation framework. The following points were discussed and noted: <ul style="list-style-type: none"> • As much as possible bores will be checked without removing infrastructure however this will be done with individual discussions and negotiations • Measurements are referred back to surface ground level readings • Suggestion that, through APPEA there is an industry wide approach to water data collection. • Unauthorised bore use (i.e. stock bore for chemical application water) does not necessarily mean that the bore will not be protected by ‘make good’ arrangements. • New bore will have reduced access to ‘make good’ requirements. • Accepted real data needed to verify models 	Simon Gossman & Carolyn Collins BD will approach DNRM to seek release of detailed water bore data. SG will provide a map indicating the 15 identified impacted water bores

	<ul style="list-style-type: none"> • Horrane trough needs consideration in regards to water monitoring • Hillier’s report will be considered in regard to data collected through Arrow’s modelling. • Allocation will not be tied to water licence allocations. • The quality of water supplied will meet beneficial use (BU) policy. • Water supply will need to match landholder production demand. <p>The ability to ‘bank’ and ‘trade’ water allocations options will need to be considered within the allocation framework details.</p>	
<p>ITEM 5 JOINT ASCRG</p>	<p>Area Wide Planning (AWP)</p>	<p>David Munro & Chris Wicks</p>
	<p>Upstream Development Presentation</p> <ul style="list-style-type: none"> • Well types and spacing • Use and applicability of well pads • Footprint of well sites • Locating well sites and gathering lines – overland flow • Coal seam depths in Arrow’s acreage are generally shallow • Required well spacing in coal widens as coal gets shallower • Deviated wells drilled from pads are planned where geology allows, requiring fewer surface locations and reduced footprint • Deviated wells present increased demands for the artificial lift pumps • Gas content increases with depth but permeability decreases • The relative value of wells and their optimum spacing therefore also changes with depth • There is a ‘sweet spot’ at around 400m coal depth; wells become marginal shallower than 150m or deeper than 700m • Exact results depend on LNG price, costs and coal outcome • “Pad drilling used where coal depth and geology allows” • Permeability, gas content and depth aspects of “geology” described above • Well construction limits also apply : • Kick off Point • Rate at which angle can be built • “Sail angle’ through coal seams (seen by the pump) • Practical limits with current technology means that deviated wells from pads can be used deeper than 400m coal depth; single approx. vertical wells must be used at shallower coal depths • Arrow will continue to develop technology to widen the applicability of pad wells <p>Key principles moving forward :</p> <ul style="list-style-type: none"> • technical solutions are flexible • the right layout must be co-created with the Landowner, drawing on knowledge of overland flows and farming plans supplemented by overland flow assessment using LIDAR data (currently being obtained) • Exclusions for proximity to homes, ecology, cultural heritage etc. • Locate wellsites preferentially on non-farmed or less intensively farmed land, adjacent to existing roads/tracks or features that allow least impact on overland flow e.g. ring tanks • On irrigated land, locate in paddock corners, may involve rerouting drainage • Wellsite design considers drainage e.g. use matting during rig visits • Co-trench gathering and underground power lines, design and route to minimise potential for channelling or ‘contouring’ of water in floods 	<p>DM will look at the possibility of high and low points being contained in a pit underground (in IFL).</p> <p>DM will confirm whether all buried infrastructure can be placed in one trench (i.e. power supply & pipelines)</p> <p>CW will clarify minimum distance requirements between CSG infrastructure and houses. In particular, Land Access code requirements vs hard limits as agreed with landowners</p>

	<p>Area Wide Planning (AWP) Trial</p> <ul style="list-style-type: none">• Area Wide Planning (AWP) has been identified as the top priority for the Arrow IFL committee• It is an extension of the gas field infrastructure planning that Arrow has done with some land holders and internally across proposed gas fields on IFL.• This research will enable better understanding of the potential impacts that Arrow's infrastructure could have on farming operations and the wider floodplain and how these can be mitigated. <p>Objectives :</p> <ul style="list-style-type: none">• Develop IFL Committee confidence in approach being used by Arrow to place wellsites and to route gathering lines• Understand limitations of Arrow's current desk-top approach<ul style="list-style-type: none">• Identify further work (e.g. overland flow aspects) that can support it• Understand practicalities of trade-offs involved, including between adjacent Landowners<ul style="list-style-type: none">• Assess how engagement process can better address this <p>Deliverable :</p> <ul style="list-style-type: none">• layout map of wellsites and gathering lines for the selected properties <p>Exclusions / limits :</p> <ul style="list-style-type: none">• map produced for layout will be subject to revision in detailed land access negotiations with landowners• exercise will be conducted on a limited area only of adjacent properties <p>The following points were discussed and noted:</p> <ul style="list-style-type: none">• Information presented on vertical and pad wells.• Well placement map presented gives confidence and certainty to landholders• Multi well pads have some trade off i.e.: greater visual impact and potentially need to access site more often.• 8m easement size for gas/water/power lines• Ploughing in the preferred method for laying the lines however recognition that in some areas trenching maybe needed.• High and low points needed for the pipelines.• AWP is a welcomed and legitimate exercise to address area concerns.• Request for Government representative to be invited to attend and observe the Area Wide Planning meetings to be held in the district (esp Cecil Plains area).	
	<p>The proposed location of the AWP research in the Kupunn/Duleen/Daandine (Area 7) region was discussed with a strong view presented that the planning work done with Stuart Armitage and his neighbours previously presented to the committee should also be continued.</p> <p>Noted it was agreed that Arrow should take up the existing offer by Stuart to assist in contacting his neighbours and to support an AWP process.</p>	<p>CW to contact SA to progress AWP in Cecil Plains</p>

Tim Neale
Precision Ag
Consultant

ITEM 5
continued Presentation on Farm Mapping

Information session for the committee on the farm mapping that will be offered to landholders as part of the AWP participation including topographical and water flow information. For more information refer to www.precisionagriculture.com.au

ITEM 6 Review of Opportunity Framing Workshop

Included in the minutes and main issue of AWP discussed in detail.
Pipeline Installation – invitation from Murphy Pipe & Civil to inspect their current plough in installation being undertaken West of Dalby, see action below.

ITEM 7 AWP Discussion

The following points were discussed and noted:

- Stuart Armitage discussed phone call before letter – advised using personal approach
- Compensation – discussion regarding how to include in the planning in that while it is a consideration, it should not be the primary focus of the discussion.
- Will be planning for all infrastructure as it as best we know it today i.e. before final design and select process has been completed. Not intended to progress to agreements with landholders.
- Obtain local landholders who are committee members to endorse AWP.
- What is timing – Expectation is to be underway in the next few weeks once details have been finalised.
- Wayne Newton suggested Chris Wicks to contact landholders who have had development on his land with another company.
- Condamine Alliance may be used to provide expert information on NRM issues, in most cases landholders will have the local knowledge.
- Noted that this is a research trial of the process and any plans would be as a test of the concept design and to identify issues that may require further research.
- Arrow will not be formalising agreements with land holders for Land Access at this time or as part of this process.

ITEM 8 Other Business

- Tek Park - pad drilling trial will be underway in a few weeks.
- Underground power – current commitment says either however should be all underground.

Action Chris Wicks to liaise with MPC to organise a field tour (and perhaps include Tek Park pad drilling trial as well)

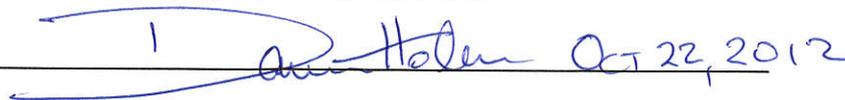
ITEM 9 Next Meeting

- The next meeting is scheduled for Thursday 13th December in Dalby (venue to be confirmed) with a 9.30am start.

There being no further business, the meeting was closed at 1.30pm.

CONFIRMED AS A TRUE AND CORRECT RECORD.

Chairman

 Oct 22, 2012