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Project	Gloucester Gas Project	From	Michael Ulph
Subject	Community Consultative Committee	Tel	4941 2841
Venue/Date/ Time	Thursday 23 February 2012 Gloucester Country Club, 10.10am – 12.40pm	Job No	21/17714
Copies to	All CCC members, AGL project staff.		
Attendees	Toni Laurie – AGL Land and Approvals Manager Naomi Rowe – AGL Community Relations Manager John Ross – AGL Manager Hydrogeology Dr Rick Evans – Independent Peer Reviewer, Principal Hydrogeologist SKM. Rod Williams – Community Representative Anna Kaliska – Midcoast Water Garry Smith – Barrington, Gloucester, Stroud Preservation Alliance Dr Gerald McCalden – The Gloucester Project Ed Robinson – Lower Waukivory Residents Group David Mitchell – Avon Valley Landcare Graham Gardner – Gloucester Council Tim Hickman – Community Representative Clr Gerry Germon – Gloucester Council Clr Tony McKenzie – Dungog Council Michael Ulph – GHD (Facilitator) Lilen Pautasso – GHD (Assistant Facilitator)	Apologies	Lee McElroy – Port Stephens Council Clr Paul Hogan – Midcoast Water Clr Karen Hutchinson – Great Lakes Council Ian Shaw – AGL Lands Officer

Topic	Action
1. Michael Ulph Welcome and Acknowledgement of Country Meeting opened 10:10am	
<ul style="list-style-type: none">Michael announced Marnie Johnson's (The Gloucester Project) resignation from the CCC and her replacement Dr Gerald McCalden.Michael drew the CCC's attention to a Lucas Energy document listing terms of reference. This was to be discussed later on in the meeting.CCC raised the question as to where this relates to the Community Engagement Plan (CEP). Michael announced that the purpose of the Lucas Energy document would be to compare it to the proposed terms of reference in the draft Community Engagement Plan for the Gloucester	



Project.

- Michael drew the CCC's attention to a list of ground rules previously agreed upon in the first CCC meeting. Graham Gardner moved that the ground rules be accepted by the CCC. Seconded by Rod Williams. Motion carried.

2. Meeting agenda

1. Introduction and welcome to new CCC appointees
2. Acceptance of previous Minutes
3. Action items and business from previous minutes.
4. Update on Peer Review of Phase 2 Groundwater study - Introduction of Peer Reviewer
5. Communicating with peer reviewer and where to from here.
6. AGL response to questions raised in the past month.
7. GCCC Terms of Reference - revisited
8. Project update
9. General business

Action: Michael Ulph to set aside time in the next meeting to discuss 'Membership of CCC' and the Community Engagement Plan.

NB: Site visit to Tiedeman property to follow lunch.

3. Actions and business arising from the previous meeting

- November minutes moved as true and correct by Tim Hickman and seconded by Gerry Germon. Carried.
- January minutes (extraordinary meeting) moved as true and correct by Gerry Germon and seconded by David Mitchell. Carried.
- Action items were reviewed by the CCC. Outcomes are as follows:

- **Action 1 – Terms of Reference**

Have been incorporated into the draft CEP. An initial TORs document from Lucas Energy was provided to the CCC. This document will be reviewed by CCC members and further discussion on the Terms of Reference will be undertaken at the next meeting.

- **Action 2 - AGL to redistribute maps with town names**

Toni Laurie has re-distributed these maps. It was requested that the kilometre points be included in the maps. Toni will re-distribute these maps once more with the requested changes.

Action: Toni Laurie to re-distribute maps with kilometre points marked.

- **Action 3 – AGL to provide a link to what has been approved by DTIRIS and to inform the community when something is made available.**

Action was tabled at the previous meeting and will be followed up by Toni Laurie and Michael Ulph.

Action: Toni to collect this information and send to Michael to distribute to GCCC.



- **Action 4 – AGL to circulate email and contact mechanisms to the CCC.**

Toni Laurie advised the CCC what these contact mechanisms were and that they are available on the communication material provided by AGL. To ensure everyone has this information Michael will send CCC members an email.

- **Action 5 – CCC to receive the final newspaper advertisement prior to its release so they can send it to their contacts.**

AGL to continue to send newspaper advertisements prior to each edition.

Action: Toni to send this information in an email to Michael to distribute to GCCC.

4. Update on Peer Review of Phase 2 Groundwater study – Introduction of Peer Reviewer

John Ross was introduced to give a brief update.

- Phase 2 groundwater report uploaded and available on AGL's website from 27 January
- Highlight and summary fact sheets are to be available on the website. Currently being prepared.
- John explained the requirements of the groundwater studies as part of the approvals process. Given the nature of investigations, and of the part 3A project approval, an extensive study must be undertaken. The current focus is the north eastern corner of Gloucester and will include technical studies and more modelling.
- John explained that key features of the whole Gloucester Basin area occur within the Stage 1 area and include all the different rock types, faulting, recharge and discharge areas, and permanent streams as well as flood prone areas. By understanding these key areas AGL can develop a better understanding of the whole Gloucester Basin.
- John provided an overview of the interview process and ultimate selection of Dr. Rick Evans as the Independent Peer Reviewer.

Introduction of Dr. Rick Evans (Independent Peer Reviewer)

- Rick asked the CCC to discuss the scope of his role in order to address any expectations or desired outcomes.
- Rick advised that he will not be covering social or financial impacts – only technical impacts. Review of the hydraulic fracturing and groundwater management systems are also not part of his role as peer reviewer at present (he sort clarification on this requirement). However, Rick stressed that if the groundwater studies indicate a potential for fracking to impact negatively on groundwater then he will certainly make a comment about this to both AGL and the CCC.
- As part of his role, Rick indicated that will be looking at 3 key reports to identify gaps or inconsistencies. All comments and suggestions will be produced as a report for the CCC who will be given an opportunity to discuss the results. This will then be an ongoing collaborative process with the CCC.
- Rick felt it was important to note that there are areas of subjectivity in relation to the groundwater study and that this is not always avoidable. These areas of subjectivity will be addressed in the final report.

Michael opened to the CCC for further questions or comments.

- **CCC: You mentioned that you aren't going to discuss the fracking**
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situation. Could that have some impact on the things you're looking at in the groundwater studies report?

Rick: This would definitely impact the review. There is a potential risk there. However, this is not part of the scope of my work but can be discussed further if the CCC expects this. I am happy to extend my current scope if there is a desire to do so.

- ▶ **CCC: Would it be fair to say that, the reason you aren't looking at fracking is because you're looking at just the groundwater studies?**

Rick: Yes. That is correct.

- ▶ **CCC: My understanding of your role is that you need to look at all these topics like fracking, the methodology for gas extraction, the impact of surface water and recharge. So why is this not occurring?**

Rick: The main reason for this not being in my scope is because the 3 reports I have been asked to review do not cover fracking. That doesn't mean to say that I can't comment, but I want to be clear of what I need to do. If I see that fracking will alter the report and the outcome of the groundwater studies then I will absolutely comment on this. Likewise, if there is a surface water management issue that would influence groundwater then I won't hesitate to comment on that as well. I am saying that while I won't need to comment, it won't stop me from making a comment if necessary.

- ▶ **CCC: But if fracking is intended, why is it not part of the assessment now? Especially given the comments Dr Evans just made, it can be a significant part.**

John Ross identified that the EA documents and recent Waukivory REF process does have some discussion about fracking, however that there is no separate fracking report that could be supplied as part of this review process. However he accepted that Dr Evans should be able to comment if required.

- ▶ **CCC: We need to discuss the model and given the information we have about the complexities, we could be facing a simplistic interpretation.**

John Ross stressed that the model in the report is a conceptual model only. There has been some simplification of it; however that doesn't mean that there won't be a more complex model later on in the investigation program. This is why this peer review process is such an important part of this so we can then look at whether these models are correct and if we can build on what we have.

- ▶ **CCC requested a clear definition of the different phases of the groundwater studies.**

John defined each of the phases. Phase 1 being desktop reviews of existing data; Phase 2 being substantial field investigations, baseline data collection and initial conceptual modelling; Phase 3 being the revised conceptual and numerical (computer) modelling; Phase 4 being ongoing monitoring through the monitoring network established as part of Phase 2; and Phase 5 being extra investigations and network locations required at any time. He also elaborated on the ongoing data collection and pre-work occurring now, for the numerical modelling.

Rick expressed that the data assessment and conceptual modelling is an important part of the review process. This will ensure that the correct



models are being used later in the project. Comments regarding the conceptual modelling will appear in the final report and are part of the scope of the peer review process.

- ▶ **CCC: We need to be very clear about what the constraints of Dr Evans' brief are and that he can have as much of an open brief as possible.**

John Ross: We acknowledge that and this CCC meeting is a good forum to ensure that we are as clear as possible.

- ▶ **CCC: I'm still not clear on why fracking isn't part of the assessment. You've fractured, de-watered and extracted gas in the past, so why is that not included?**

John Ross: Mainly because fracking is not going to impact on the broad hydrogeology of the Gloucester Basin. The purpose of the groundwater reports is to ensure that we understand all the hydrogeological characteristics of the project area first.

- ▶ **Michael: What's driving that conclusion?**

John Ross: Those localised impacts associated with fracking at depth that extend out for ten of metres don't impact on the regional groundwater or river systems. There are other more fundamental experiences that impact the groundwater more such as rainwater recharge or faulting.

- ▶ **CCC: I think what should be part of the brief is not to exclude this?**

John Ross: Yes. And we agree. We are not excluding this at all but let's be clear on what we want as part of Rick's brief.

- ▶ **CCC: A lot of people are under the impression that fracking can be a huge issue, which is why I asked the question.**

John Ross: I think what we can do is provide Rick with a copy of the Waukivory REF and the methodology/studies planned for this drilling program.

- ▶ **CCC: Could the REF in Waukivory also provide a whole set of other issues or results?**

A discussion was had regarding the proposed wells that exist at Waukivory and their relationship to each other in relation to fracking and extraction purposes. John Ross explained that these pilot wells and the monitoring bores that are installed to monitor shallow groundwater are a significant part of helping AGL understand the recharge, discharge and flow within the different groundwater systems in the Gloucester Basin. AGL can provide Rick with a copy of the Waukivory REF as an addendum to the three groundwater studies reports. This contains the best available appreciation of the planned fracking process and should allow some assessment of the hydraulic impacts of fracking in the IPR report.

- ▶ **CCC: Can you explain the pilot wells in Waukivory and why the blockade caused issues?**

John Ross: We have a pilot program planned for Waukivory – 4 deep gas wells 500-600 metres apart. Flow testing would be undertaken to test the gas and water production profiles. Drilling was proposed to start pre-Christmas. There is no current approval to fracture and flow test but we are intending to have a water monitoring network in this particular area as soon as possible. Currently our teams are putting those bores in, in order

to get baseline information about groundwater systems in this area. This is an important opportunity to collect additional information about what happens when we de-pressurise the deep (target) coal seams in an area of thrust faulting. This is an essential test and scientific program that will be able to give us extensive and invaluable information about the coal seams, the flow of the gas, and any groundwater migration or connectivity. This information is pivotal because it is a whole separate study that will indicate whether there are issues with our conceptual modelling or future well locations. If this happens to be the case then we would need to rethink a lot of aspects of the project. We feel that we understand the groundwater systems really well already but this would just be absolute proof that the areas we have chosen are appropriate for the purposes of gas extraction. The blockade delayed this assessment process significantly. Through the GCCC and this IPR process we are trying to be even more transparent, improve our messages and increase our information flow.

- ▶ **CCC: I feel like one of the key issues with the gas extraction process is de-watering. I want to know more about this.**

Rick: The primary issue in this sense is the de-pressurisation of the coal seam (rather than de-watering which involves de-saturation of the rock unit and the replacement of water with gas and air). You have to reduce the pressure in the coal seam to extract gas and if this is lowered significantly de-watering occurs when air is introduced into the coal seam. This occurs because the level of the water is now below the top of the coal seam. There subtle differences between the two processes.

- ▶ **CCC: If we're talking about water then dewatering is critical, right?**

Rick: Yes. But I'm talking about two types – depressurising and dewatering of coal seams. I am definitely looking at de-pressurising, but in that sense I need to look at the natural and stress influenced processes. My role is to see if the report covers this appropriately. The additional stress that coal seam gas extraction has is a key part of this study and is an important part that needs to be considered as part of my brief.

- ▶ **CCC: For me it's important that the report is reviewed and that you can make conclusions about the outcomes. Can you review more than just the groundwater monitoring?**

Rick: Yes. And I can await instructions of further requirements.

- ▶ **CCC: Rainfall, how important is this?**

Rick: Always very important. In most but not all processes groundwater is influenced by rainfall and can affect the systems. Rainfall recharge, in most CSG cases, can be irrelevant, however one needs to consider what influence it has on the slow processes of groundwater movement and how this is further impacted by coal seam extraction.

- ▶ **CCC: I'm curious to see if there is an exacerbated effect as a result of excess rainfall or flooding.**

Rick: In some areas where there are shallow bores rainfall would be a huge factor, however with deeper bores that can go to 1000 metres then rainfall impacts could be muted.

- ▶ **CCC: Just drawing your attention to the Parsons Brinckerhoff report. This report concludes that they aren't sure what effect faulting has on the coal seams and process of extraction.**

Rick: Yes. And I'm not trying to mislead you in saying that there is no

uncertainty in a project, but this is normal and I'm not trying to agree or disagree with the conclusions in this report because I haven't read it. In most cases faults cause less flow and in my experiences they don't increase flow but they reduce or impede flow.

- ▶ **CCC: But what you're saying is that you don't know, which I think is a big issue here.**

Rick: I'm not trying to mislead you in saying this.

- ▶ **CCC: I want to know if these 3 reports are the most important ones and if there is something more significant to come.**

John Ross: There is no doubt these reports are important but in terms of prediction to see the impact of coal seam extraction we need to complete two important steps. One is the Waukivory pilot to prove that the different groundwater systems are not connected and if they are, we need to re-think the location of wells in faulted areas. Secondly once all the important data sets are in we need to build and calibrate the computer model. It can then be used for predictive purposes.

- ▶ **CCC: Why are there no models that exist already given earlier investigations?**

John Ross: Timing issue. Earlier flow testing programs were done during Lucas Energy days with only limited groundwater monitoring. We don't have the factual information on what's happening (if anything) on the shallow groundwater and surface water systems which is why we need the Waukivory pilot.

- ▶ **CCC: At some stage there needs to be something done about surface water.**

Rick: A flooding study isn't going to add value to the groundwater study because it doesn't have an impact on regional groundwater processes, faulting etc. There is no debate that surface water isn't part of my brief, but the issue for coal seam gas is the low flow studies (i.e. during drought periods). What is definitely not part of my brief are high flow studies but if you think otherwise you need to let me know.

Motion was made regarding the brief of Independent Peer Review. Moved by Graham Gardner and seconded by David Mitchell. Motion unanimously carried by the CCC.

Motion: The CCC recommend that AGL expand the brief of Independent Peer Review to add contextual comments on the issues relevant to extraction activity and completion methods (fracking and under reaming).

- ▶ **CCC: Won't these extra tasks delay the review process?**

Rick: AGL would need to get me a lot of information immediately in order for me to meet the required deadlines. John: I think all of the information you need is in the Waukivory REF and in the project EA and we can provide immediately, no problems.

- ▶ **CCC: I would like AGL to respond to the review Professor Phillip Pell did of the report by Parsons Brinckerhoff.**

John Ross: AGL can respond but I don't think that it is appropriate for the IPR. The purpose of this review is an independent review of the studies to date not a review of a review. For Rick it is a contextual document so I think it's necessary that he read it so that the overall review of the groundwater studies can be in perspective. But I think that we need to



keep this as independent as possible and allow this IPR report and consideration of the report by Pells to happen after the review of the groundwater study.

▶ **CCC: Professor Pell's comments are significant and can't be ignored.**

Rick: No of course not, but I would not like this to influence the independent review of the reports provided by AGL. I am more than happy to read this report once I have made my own judgements and conclusions.

5. Communicating with peer reviewer and where to from here.

Rick: The brief says that I should produce one final report. But I would like to present a draft report if the CCC accepts this.

John Ross: we certainly agree that would be helpful. We would like a draft in about 4 weeks (by 20th March) and to have this circulated to the CCC. From there we would do a second draft following comments from the CCC and then present your findings at a final meeting. We don't want to put constraints on you, we want you to take the time you need and then present say in late April.

▶ **CCC: There is no scheduled meeting in March, so what meeting are you referring to?**

Michael: No there isn't. It would be an extraordinary meeting if the CCC approved of it.

▶ **CCC: I think it is difficult to transfer this information into plain English for us. I believe that this will be an issue if we are to review the first draft, so we really need time to discuss it and raise questions.**

▶ **CCC: I find it difficult to understand the scientific stuff and not feed off other people. In that sense we would need a meeting to discuss what we have and what questions we need answered. I think the group needs to be involved in this.**

CCC agreed that this was absolutely necessary.

Action: Rick to produce a draft review report by 20th March

Action: Michael to organise an extraordinary meeting on 2nd April and invite Dr Evans to speak.

Action: GCCC to send any questions to Michael prior to the meeting 2nd April. Questions to be sent to Rick.

6. AGL response to questions raised in the past month

Rick will be providing responses to questions raised in his Draft Report in the presentation for the Final Draft Report on 26th April.

▶ **CCC: Our main concern has been legal rights as part of the GCCC.**

Naomi: our intention is to be able to put CCC members concerns at ease and make separation of powers. CCC members are concerned that they could be liable for decisions made down the track and our consultation with legal representatives aims to alleviate these concerns.

Michael: the current terms of reference are quite clear that the CCC is not a decision making body.



- ▶ **CCC: For me the main concern is that we have a big lack of independence from AGL. I am comfortable that there are two decision making roles where we recommend things and they are decided upon by AGL, however we want (in relation to the community expectation and perceptions) and the independence CCC members have from AGL.**

Naomi: We understand this completely and if there is a perception in the community then we need to address this.

- ▶ **CCC: I agree but I think that Michael as an independent chair needs to extend his role. My concern is that there are perceptions that we are making decisions together (such as the newspaper columns that suggest mutual agreement) and Michael should have the responsibility of communicating the views of the CCC not of AGL.**
- ▶ **CCC: I don't see AGL as being part of the CCC and I think the line between the two should be made. We need to make sure that this process is not going to suffer as a result of a lack of perceived independence.**

Naomi: Are you looking to try and resolve these existing issues now or would you like to table this?

- ▶ **CCC: No I am happy to table this and encourage discussion on the terms of reference as well because it is vital to keep this process going in a positive way.**
- ▶ **CCC: It is a strong view in the community that AGL owns the chair of this committee. The community newsletters make it appear that the CCC, for example, pick the peer reviewer which I don't think is particularly correct.**

A discussion was had about the perception of independence in the community and the potential for GHD to produce communication collateral independent of AGL. Some issues identified included the lack of an independent CCC report. AGL proposed more time to be committed to the Community Engagement Plan and the terms of reference.

Tony MacKenzie (CCC representative) moved that Michael develop a press release outlining the appointment of Dr Rick Evans for the Gloucester gas project. Seconded by Graham Gardner. Carried.

- ▶ **CCC: Requested more information on the reason why there isn't a holistic study rather than partial.**

A discussion was had regarding the desire to have a holistic study of the Gloucester Basin, given information that the CCC have received regarding vast differences in the geology of the area. The action groups believe it is not unreasonable to request a holistic study.

The discussion went on to highlight the Part 3A planning and the stages of the project that falls under the previous legislation and what the new legislation covers. There were clear differences in opinion regarding what can be done under these approval processes, particularly given the changes in Part 3A.

- ▶ **CCC: My concern is that, before the state government grants concept approval, what is required is a complete hydrogeological study of the entire area.**

Motion: AGL, CCC and GHD to discuss community perceptions of 'independence' further at the next meeting.

Action: Michael to provide a clear agenda of the next CCC meeting that allocates more time to the CEP and terms of reference.

Action: AGL to provide a clearer response to the CCC's request as to why there is not a holistic study of the Gloucester Basin area.



A motion was presented to AGL regarding the desire for them to provide clarification on why a holistic study is not being undertaken. AGL agreed to action this motion.

Blockade incident:

A discussion was had regarding comments that were made between members of the community and AGL at the site of the blockade incident late last year. The discussion had involved what AGL committed to in relation to ground and surface water. It was stated that AGL could not commit to a full study of the entire basin even though the Alliance was convinced that they were told this would happen.

One CCC member was not happy about being put on the spot to recall the happenings of the discussion. He said he would like to go back to the Alliance rather than be brought up in the CCC meeting. The CCC chair stressed that it was not a request from AGL to have this discussion but rather that it was in response to an emailed comment from Marnie Johnson. The CCC agreed not to revisit this discussion.

7. GCCC Terms of Reference – Revisit

Michael detailed aspects of the terms of reference and asked the CCC to draw their attention to a Lucas Energy document from 2008. It was requested that this be compared to those in the CEP for Gloucester.

Action: GCCC to review the documents and to discuss the terms of reference in this document at the next meeting on 26th April

8. Project update

Toni Laurie provided a brief project update.

- ▶ Seismic surveys to happen in March – Weather depending
- ▶ AGL have confirmed that they have acquired land to the North of the Tiedeman property.
- ▶ AGL have also confirmed they have acquired land from Gloucester Coal for their central processing facility.
- ▶ Discussion was had about the land that was purchased north of Tiedemans with the potential to be used for irrigation trials.
- ▶ Water bores Waukivory – Rig to be pulled out due to wet weather

CCC were asked by AGL about the reporting of incidents and asked that all incidents be reported on regardless of how trivial the incident may be. AGL elaborated on this question and identified the categorisation of incidents (e.g. environmental) and how they are incorporated into AGL management plans. This question was in relation to a recent minor incident where a hydraulic hose burst and spilt oil on a small patch of grass (1m x 1m).

- ▶ **CCC: is there clarification of what is an environmental incident?**

Yes, there is.

Action: AGL to clarify what is and isn't reportable.

9. General business

- ▶ **CCC: Question regarding a statement of the suitability of a property**
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to be considered to be in a 'flood area'.

Toni Laurie explained that the statement was based on the flood mapping a standard requirement in the REF. There is no flood mapping available for this area.

CCC member raised the GRL flood mapping. Toni Laurie explained that at the time of the REF this mapping was not available. Toni went on to explain that there AGL have flood mitigation procedures and flood management plans for well sites that are subject to occasional flooding.

- ▶ **CCC: As a person who is just downstream, I am deeply concerned that there will be wells on a flood plain.**

It was raised that the wells were not known and there was confusion regarding the release of information and the fact that this was not communicated to the CCC. AGL disagreed with this and advised that this was brought up in the March CCC meeting and subsequent meetings.

Action: Michael to include the mentoring program mentoring as part of the next meeting.

10. Next meeting – Michael Ulph

- ▶ **Next extraordinary meeting 2 April 2012 to discuss the first draft of the Independent Peer Review of the water studies.**
- ▶ **Next general meeting 26th April, 2012**
- ▶ **Meeting closed at 12:58 pm**

Action: Clarification needed regarding the flood management plan and the reason for placing wells on a floodplain.

Michael Ulph

GHD – Stakeholder Engagement