

MINUTES OF THE MEETING

LESUEUR COMMUNITY CONSULTATIVE COMMITTEE (LCCC)

HELD AT HARVEY SHIRE COUNCIL CHAMBERS

31 May 2016

Committee Members Attending

Simon Holthouse	Chairperson
Bernard Ridley	Nominated Representative for Nola Marino
Laurie Snell	Community Member
Michael Parker	CEO, Shire of Harvey
Tania Jackson	President, Shire of Harvey

Attending:

Dominique Van Gent (DVG)	Coordinator, Carbon Strategy, Department of Mines and Petroleum (DMP)
--------------------------	---

Observers:

Martin Burke	Project Manager, South West Hub, DMP
Kelli Jones	Project Assistant – DMP

Guests

Louise Stelfox	Senior Geoscientist – DMP
Sandeep Sharma	Technical Consultant

Apologies

Fay Treeby	Community Member
Robyn Allingham	Community Member
Louis Fouché	Director of Development Services, Shire of Waroona
Robyn Coombes	Community Member
Cim Sears	Community Member
Mike Whitehead	Nominated Representative for Murray Cowper

Agenda Item 1 – Welcome and Apologies

Meeting opened at 2pm - Chair welcomed everyone noting that we are light on numbers – and has been some time since the last meeting.

Agenda Item 2 – Notes from Previous meeting

Bernard confirmed the minutes as read. There were no other comments.

Agenda Item 3 – Agreement with the Commonwealth

Dominique introduced guests Louise Stelfox (DMP) and Sandeep Sharma (technical consultant).

At the last meeting Dominique briefed the LCCC on the Commonwealth Review conducted by the (Department of Industry, Innovation and Science (DIIS), and a new agreement for DMP to continue work on the South West Hub project. Dominique advised that a new agreement with the Commonwealth has been finalised with project activity extended out to June 2018.

Dominique provided a presentation - (Attachment 1), on the project acceptance criteria, contractual obligations and highlighted the development of an Uncertainty Management Plan (UMP) to assist in the identification, assessment and planning of the technical work program.

Dominique noted that in order to meet the set criteria, DMP may need to conduct further static and dynamic modelling (discussed in further detail at Item 4).

DMP is in the process of finalising the current modelling activity and forward work plan. This includes the process of creating an Uncertainty Management Plan, which will assist in identifying areas that require further research and/or additional data gathering activity through field activity such as drilling.

The decision on whether to drill Harvey 5 is 12-18 months away. If a decision to drill is made, then funds for the program need to be found. In essence, DMP does not expect much on ground activity to occur for the South West Hub project in the next 2 years. However, there is research interest in the area from Curtin University, University of Western Australia and CSIRO. Small scale research activities are planned and being considered.

In summary – there is enough confidence in the work DMP has done to date to keep the program going

Bernard: So there's nothing happening in the 12 months – is that due to funding?

DVG: No one is looking at spending money (state and commonwealth) at this stage.

Bernard: Universities, are they having output, they appear to have more funding?

DVG: yes, they have small amount of money and will be looking at small scale research and this will be ongoing.

Simon: There appears to be two levels of interest coming from the Universities; (1) appears to be prompted by the current work being done and (2) the core question is the capacity to store CO₂. With the DMP having obtained sufficient and reasonable information, has this prompted the interest into outside organisations?

DVG: The researchers are currently looking at over 2 kilometres of core and will be analysing this for a number of years. There's much information that will come out of the 3D data. For example, Curtin is using our data to look at things in a different fashion. The ultimate aim is to explore how things can be done in a more cost effective manner.

Simon – Does the data collected and works conducted by DMP have additional research possibilities?

DVG: It has opened up opportunities to look at things in greater detail. There is more information here than in the rest of WA.

Simon – There seems to be more benefits. Is this area suitable? This is the fundamental question that is still being examined. Have we reached a conclusion?

DVG We will have a preliminary answer in August, following the current modelling program, and there will still be additional activities required to answer that ultimate question. If we look at the core analysis program as an example, we had certain parameters; it has answered some of those questions, but also highlights areas of risk and uncertainty that may need to be addressed before the ultimate answer can be determined.

As a department, we probably have enough information to say if this was an oil and gas play, we have confidence to put it out for an Exploration Permit. However, because this will be a cost to industry, we will require a greater level of detail – industry will not invest unless more information is made available.

Simon: So it seems as though the project is continuing to explore in order to assess the potential for CO₂ storage to identify the risk associated with it. The other side is assessing the possibility of the resource being utilised. There's a level in which there will be buy-in in that regard that is still a very uncertain position.

DVG: At this stage, there is no commercial project. But on the other hand, all of the joint venture parties retain an interest in the project, not enough interest to commit large amounts of money on, but to keep it as a consideration or an option for future projects.

Agenda Item 4 and 5 Core analysis program and modelling results

Louise Stelfox, Senior Geoscientist from DMP and Sandeep Sharma (technical consultant for DMP) provided a presentation to the Committee on the core analysis program and the modelling results. The presentation included information on the following and is included as Attachment 2

- How core samples were selected and tested
- The results of the core analysis/testing program.

Sandeep set the context by providing the history of the project and then articulated through the use of analogues what geologists think the area of interest looked like millions of years ago.

Michael: Asked for a reminder on how much CO₂ comes from a power station?

Sandeep: roughly five million tonnes per annum, however, this will need double checking. (See footnote).¹

¹ This note provides an explanation of the above, individual performance will vary from power station to power station. A power station size (or output) is normally described in Megawatts – Mw. The amount of CO₂ produced varies by a power station depends on a number of factors including age, size and technology, but most importantly the type of coal used.

DVG: That figure may be high and is probably based on Victorian power stations.

Sandeep: Explained how this would translate into wells

Michael: What are results over 4 or 5 wells? Have you done this work yet and assessed the probability? How much can we get in?

Sandeep: There are four wells in the area for stratigraphic purposes. Based on advice received from DMP's Petroleum Division we need to have a certain amount of tonnes with less than ten (10) wells. That's minimum standard but we don't know the amount yet, it is still work in progress. However, based on the information we have, there is a high level of confidence that the reservoir can support CO2 storage.

Dominique asked if everyone understood the P50, P90 scenarios as they appear in the presentation. He then explained the concept of probability expressed as a P level of confidence. Assuming a normal set of behaviours P50 is the normal or reference case at this stage of investigation. This represents a 50% level of confidence. He noted that the most optimistic case will be around the P90 but due to the early stage nature of the project, DMP and the Commonwealth will focus on medium number. This number will increase as more information becomes available.

Simon thanked Sandeep and Louise for the presentation, noted that it was good and clear and asked if there were any questions? No questions were raised.

Simon: Whether or not we end up with a live project, the information and analysis for the project is of great interest. Given the investment in this project, what we may end up with is a body of science that will provide a great understanding of this region. Is that a fact?

Louise: The volume of information is vast and there will be a very good and comprehensive analysis of the underground stratigraphy in the area.

DVG: The current leases on the 3 wells go out to the end of 2017. There is great interest from the research partners to utilise the wells going forward for scientific purposes. One of the other things that should be mentioned regarding the lease agreements, should the project not proceed, DMP has locked away money in the budget to plug and abandon the existing wells and rehabilitate the surface area.

Michael: The model that you are using is that standard elsewhere or developed for this particular project?

Sandeep: The process for establishing the model is standard; it is the area that is unique

Michael: Who owns the IP and data for the model?

A Victorian brown coal (lignite) power station of 500M would produce approximately 5 Million tonnes of CO₂ per year. A West Australian equivalent (sub-bituminous black coal) would produce approximately 3.5 million tonnes of CO₂. [The Victorian coal power stations emit more CO₂ emissions due to the high moisture content of the brown coal.](#) A gas fired equivalent would produce approximately 2 million tonnes of CO₂.

DVG: All the data and modelling will be publicly available. For example, Louise's report will be available when finalised. Available to everybody.

Agenda Item 5 – Research Program

Martin provided presentation on the active Research Programs in the area – this is included as Attachment 3.

- UWA passive seismic
- Curtin University MT project.

Information on these projects has been provided at previous LCCC meetings. A third research project is proposed. Curtin University is proposing to conduct a nested 3D seismic survey around the Harvey 3 well location. This is similar to the project they completed in 2015.

Martin provided information on the Curtin Nested 3D seismic survey planned for later this year and spoke about the further installation of receivers for the passive seismic survey. Also mentioned was the IEA GHG Summer School that visited Harvey in November 2015. Martin thanked Tania for addressing the students and providing them with an understanding of the community perspective of CCS the South West Hub project. It was well received and gave them an understanding of the personal impact of an actual project. Many have since been in touch with DMP asking about the impact of the fires on the community which is proof that the talk resonated.

Dominique noted the recent earthquakes and that the receivers currently in Harvey picked up seismic movement which provides a benefit for Australia. This information was sent through to Geoscience Australia for further analysis and is contributing to the National understanding of seismic activity.

Tania: How does this affect this project and can we predict earthquakes?

DVG: Not sure about predicting earthquakes, but gives a very good baseline of information about earthquakes and their location.

Tania: In layman's terms we all felt the earth move, is this safe for this project and is it enough to say what is happening?

It was noted that earthquakes occur much deeper than the areas that we are looking at for CO₂ storage. CCS is being looked at in Japan and they are prone to earthquakes. It was also noted that there have been instances in North America and with the Otway project in Victoria where earthquakes have occurred in the proximity of storage projects. In all cases, there was no impact on CO₂ storage.

Agenda Item 6 – Questions and Other issues

Land Access for the seismic survey

Consistent with the Geokinetics seismic survey (2014) and the previous Curtin nested 3D seismic survey (2015); there will be no access to properties unless there is a signed approval/access agreement with the landholder.

In October 2015, The Minister for Mines and Petroleum welcomed the development of a land access framework for oil and gas operations in WA. The agreement was developed by a joint committee

chaired by former WA Deputy Premier and Nationals Leader Hendy Cowan. It has been endorsed by the Australian Petroleum Production & Exploration Association (APPEA), WA Farmers, Pastoralists and Graziers Association of WA, and vegetables WA.

DMP has previously used an attached land access template which was designed to keep things as simple as possible. It is proposed that future access requirements for the South West Hub project and associated research projects will use the template developed by the Cowan Committee.

Agreed by all

Michael: Where to from here regards to community consultation?

DVG: At this stage we are looking at receiving a final report in August and we will present the results and update the community once this process has been finalised.

Michael: You don't think it's worth telling people now? What do we tell the community if we are asked?

DVG: The modelling results are not final, nor have they been peer reviewed. In terms of other activities the federal election is on at the moment, there is a large amount of unknowns. The project is ongoing and there is funding available.

Simon. In a way and from a broader community perspective, there is an initial question – can we store CO₂ in the area? Work needs to be conducted to determine the capacity of this particular part of the world to receive CO₂ injection and that's based on the possibility that there will be a market, or value for industry to make it a viable proposition.

The question we are now asking whether that proposition has changed. The project has always been based on a series of gateways to determine whether it is or is not viable. Industry willingness to contribute was always part of that equation.

However, it seems that there are some secondary and expected outcomes. These open up other options such as the research work that is mentioned but also seems that whatever the outcome, there is a bunch of information, science and knowledge about the region to the extent and detail that may have greater interest and benefit. I'm just wondering if there is another value or public interest with all the information available. Is there another value that we might contemplate?

DVG There is a value. There is a great deal of scientific knowledge being placed on Harvey at the State, National and International level. We're not quite ready for a full assessment of what we have and can achieve with the information that we have collected, but we will be in a better position to determine some of that once the modelling has been completed.

It should be noted that DMP has not forgotten our responsibility to tell that story to the community and take on board what you're saying. We need to clearly articulate the broader science applications of the project and what this means. This includes the hydrological study due out in 4 weeks.

Simon: Any information that can promote interest in Harvey is good, there is something that can be wrapped up and presented. The question is how can this potential be utilised?

DVG We've had success with St Anne's Primary School, and St Michael's in Brunswick, with CarbonKids, but we've had trouble getting into other schools.

Tania: The summer school visit highlighted that there is interest in the project and it would be interesting to see what kind of numbers are out there and other opportunities to support visitors to the area.

DVG: One of the things that we encourage with our project partners, stakeholders and contracts is support for local business. This includes overnight stays for on-ground activity.

Bernard: To summarise, the capture part is not going to go ahead, the carbon tax has gone and industry not investing, but there have been additional benefits to the project and that these were possibly unpredicted.

Michael: I think what needs to be communicated is the status of the project, what we have learnt and the spin off effects which seem to be positive. This needs to be done and I think there's some real interest in those three elements.

Agenda Item 7 – Next Meeting

The date for the next meeting was not discussed; DMP will make arrangements in August once the modelling process has been completed.

Meeting Closed at 4pm.

Attachment 1

Dominique Van Gent Commonwealth Update

Attachment 2

Core Analysis & Modelling Results

Attachment 3

Research Projects Update

Are available as separate attachments on the website