

ENSHAM RESIDUAL VOID STUDY COMMUNITY REFERENCE GROUP MEETING MINUTES

STANDING ITEMS

FORMALITIES

Date	Thursday 13 th December 2018
Meeting Opened	10.00am
Venue	Ensham Resources, Duckponds Road

ATTENDEES

Position	Name
Independent Chair	Emma McCullagh
Members	(Refer to attendance sheet – Emma)
Guests	
Ensham Representatives	

APOLOGIES

Position	Name
	Refer to Emma

FORMALITIES

The chair welcomed and thank everyone for attending today's meeting.
Approval was gained from members to record this meeting.

DECLARATION OF INTERESTS

No further declarations of interest noted.

CONFIRMATION OF PREVIOUS MINUTES

MOTION THAT: The minutes from previous meeting held on the 10th October 2018 be accepted

MOVED: Nigel Burnett

SECONDED: Cameron Geddes

VOTE: Unanimous

Approved and Carried

BUSINESS ARISING FROM PREVIOUS MINUTES

Carried Over.

PROJECT UPDATE – STAGE 3

Below are the new reports issued to CRG Members:

- Risk Assessment Report
- Ecological Assessment Report
- Environmental Assessment Report
- Economic Impact Assessment

DY - The Groundwater Report will be re-issued due to an error that was found in the ground water study. The ground water study was stopped to review the land forms; the project construction was then restructured, and the ground water consultant didn't pick up the last changes that had been made. They had to go back and update this, which changed the land height of the water. F & Y pit now sit above ground water, this information is to be updated in the below listed reports:

- Groundwater (correct F & Y landform)
- Water Balance & Quality Report (revised source terms for groundwater)
- Landform (new cross sections for F & Y landforms)
- Civil (new details for F & Y landforms)

Comment	The last reports that went out don't have the updated details
Response	DY – The reports can be reissued if requested. The reports given out today are all in draft and need to be reviewed. In terms of reports, the only report left is social aspects which is currently in progress and looking at being distributed next week.
ACTION	Update and reissue landform reports to show the new cross sections for F & Y Pit

UPDATED STAGE 3 REPORTS

GROUNDWATER & UPDATED LANDFORM CROSS SECTIONS

Option 1:

DY – This includes all voids A to Y Pits. Diagrams were displayed via PowerPoint to show the landforms after rehabilitation is complete. F & Y rehabilitated landform are above ground water rest, with a minimum of 5 meters. The landform isolates rehabilitation areas from the floodplain into perpetuity. Groundwater “day lighting” circa 100 to 200 years.

Comment	If there is ponding in F & Y pit we will still have salty water.
Response	DY - The water will be rain water, it will be catchment run off as it's not sitting on the ground. In a heavy shower you will see water accumulate and move to a low point. PG – If there is a heavy downfall, over time it may not block up the little pores. If it does, it may bring down a small amount of water. The salt water coming from the ground is 50 mc, you can irrigate with that, it won't have any salt content, it will leech out of the upper surface of the area that's draining off so there will be less salt. There's nothing that will be adding salt.
Question	How can vegetation grow under water?
Response	There will be regrowth when the water evaporates. This is the worst-case scenario. There is a process that we will have to go through in getting the rehabilitation signed off by the regulator. You as landholders will have input on this, the business provide you with the opportunity for land holders to submit something if you want to challenge this. Ground water is a max in 100-200 years. Ensham is starting rehab in Boggy Creek next year and following that will be Y Pit. The lease expires in 2028, there are still a good few years of activity in that area. Noel has said that he is pretty comfortable that this is the max. it can get to.
Comment	What is the timeframe? One of the reports says 2038?
Response	PG – This is in all pits. We recognise there is a deadline and we will keep you updated on the scheduling and any changes.

Option 2:

DY - This is very similar to the last meeting. Diagrams were show by PowerPoint presentation.

Comment	Concerns were raised about the marketability of the water; will people accept the water that is in the system
Response	The reservoir is the post mining landform that can be run post mining lease. We would be seeking community representatives to see what the best application of infrastructure is for this water. This option would need to go through a commercial rigger, we aren't going to pay for water infrastructure. We will build the landform if as a land owner we can bring beneficial use to the community, if not we still have a stable non-polluting landform. In the submission we will say that we will build the landform that give the opportunity to provide beneficial use. Option 2 doesn't have any ground water.

Option 3:

DY – Groundwater is at rest, there is no inward catchment zone for C and D pit, they are free draining. Our concern is the rate of erosion, backfill pits will erode a lot quicker no matter how hard it is compacted with a roller. If there is erosion, the dirt will go to the lowest point of the landform. Out further, the erosion will go to the receiving environment.

Question	Has there been any work done on the risk of erosion in the flood zone?
Response	DY – Yes, this was done in the hazard of ability study. The risk assessment talks about confidence in engineering design. Option 1 and 2 the confidence level is high as any erosion goes to the lowest point of the landform which isn't the receiving environment. We have no control over what happens with erosion. There will be higher erosion in C & D pit than in any other landform, we will it as good as we can, but it is open to floodplain.

WATER STUDIES

DY – the below list of changes since the October CRG were displayed via PowerPoint Presentation:

- Hydrology: No changes
- Geomorphology: No changes
- Geochemistry: No changes
- Groundwater: Rerun with correct landforms (F&Y areas)
Extract new groundwater inflow/outflow curves
- IQQM: Standalone operation
Climate change simulation
- Water balance: Rerun with updated landforms & groundwater inputs
Improved representation of declining salt load
- Short & long term
Revised climate change sequence for IQQM consistency
F & Y Pits no longer modelled due to backfilling to 5 m above groundwater

Option 1:

DN – PowerPoint presentation displayed graphs of water quality over 150 years. There is no ground water in F & Y pits. What does daylight on the floodplain does not spill into the receiving environment. You get a slow rise in salinity over time. Climate change does show the water levels a few meters lower.

Question	Regarding climate change, are we looking at more rain or less rain?
Response	DN – Climate change will be affected differently in all areas. There are fundamental changes in the area and it's based on the different weather patterns. For this region, they have tried to narrow it down as small as an area as they can. Rainfall wise, it is fairly low, as far as natural viability goes, we wont really notice. There will be changes in temperatures and evaporative change. OD – We are not saying this is what is going to happen. This is the best knowledge we can get, there is going to be a change and we are looking for the types of changes. There is a fairly large effort that goes into climate change globally. It's an issue if it's not managed properly. This information is brought down from government and we have adopted series of data and have tapped into states information and applied it.

Option 2:

DN – PowerPoint presentation displayed graphs of water quality over 150 years. There is no ground water in F & Y Pits. Water quality is dominated by the river inflows. There is a higher salinity in dry periods as water levels are drawn down.

Question	If Option 2 goes ahead, for irrigators to make use of this water they would have to make big investments too. The quality of this water is important. How could you assure customers the quality of the water, especially during dry times?
Response	DY – The models and reports are all open books and we are happy to provide full reports upon request.

	<p>OD – I think with any water project this is a classic question. These graphs show that it is manageable and there are no red flags.</p> <p>DY – The salinity is not significantly variable over a month to month six month basis. The model is what are the impacts over a long period of drought, showing that in drought periods it does strike up. At the moment this is based on high priority water. At a commercial aspect this has to go over different hurdles.</p> <p>OD – we are trying to be as consistent as we possibly can. When we talk about high priority water, this is meeting the standards of high priority water.</p>
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LANDFORM DESIGN

DY – This is the first time that anyone has seen the Hazard & Operability Study (RA), I am happy to sit down and go through it with you.

The Options risk assessment is complete as displayed via PowerPoint presentation:

- A Hazard & Operability Assessment has been completed
 - A HAZOP is a form of risk assessment used to review the design to pick up design and engineering issues that may otherwise not have been found.
- Options 1 & 2: >90% confidence of a long term safe, stable and nonpolluting landform.
- Option 3: 30%-60% confidence in the ability to maintain a safe, stable and nonpolluting landform post certification into perpetuity.

ECOLOGY

DY – We have an obligation that the final rehabilitated areas be safe, stable, non-polluting and not creating significant harm to the direct environment. What this report is showing, is that there is no significant environmental harm on any of these options. We have permission from the regulator to do the report this way based to focus on the environmental and social impacts.

Option 1 and 3 are correct. Option 2 is assessed as the water has been moved forward. If we built the landform and no one took it on there would be water daylighting in some areas.

Handouts were provided for impacts and benefits to Environmental Values.

ECONOMIC IMPACT ASSESSMENT

DY – Tables were displayed via PowerPoint detailing results of the Economic Impact Assessment Report. Option 2 has a significantly larger benefit.

Key assumptions noted below were displayed via PowerPoint presentation.

- 20 GL of High Priority irrigation water
- Use for Citrus production
- 10ML of water per hectare for citrus
- Result in 2,000 hectares of additional citrus
- Currently 1,005 hectares of citrus
- Estimate \$40m gross revenue existing citrus
- Gross profit 30% = \$11,940 per hectare
- Evaluation very sensitive to this value

Comment	I guess the focus is on citrus and the land available for irrigation systems. The water out of the pits is different than water that comes from irrigation. I'm looking at the image, how some people will angle it; if it's for food production and people see you're looking at water being pumped out of a pre-mining pit.
Response	DY – This has to be modelled on something. There are some people who do this for a living, and if Option 2 gets up and running and is accepted by the regulator there will a process on this. OD – Within this assessment high priority water was used to show a benchmark and show a measure on scale. The reports looks at the benefits, is it worth pursuing. If this stacked up there would be another process in place to look around the detail and see what people actually wanted to do.

SOCIAL IMPACT ASSESSMENT

Andrea – There were 48 people who were willing to be interviewed as part of the SAI. The survey that was conducted at Agrow, in the workplace and in the SIA, the preferred option, was option 2. It is important to note that this data doesn't reflect that people preferred their option. The feedback has been provided over the life of the project, first starting in April 2018. In round 1, Option 1 looked very different and didn't have many visuals. Round 2, more information was provided, and people did shift, the SAI shows how this changes across the project. It is possible that we may see shifts again when more information is provided. The Social Impact Summary Report is currently under review. It should be ready to be distributed by mid to end of next week.

NEXT STEPS

DY – We are wanting to wrap up the technical documents before Christmas and come back in the early new year to take on feedback and adjust accordingly to complete the Triple Bottom Line Assessment (TBL). This gives us about 4 to 5 weeks. Most of the studies have been complete, we are keen to get feedback and tweak or adjust were needed.

DY encouraged feedback from all attending the meeting, with feedback to go via EM. Feedback is required by the 20th January and is happy to take feedback as it comes.

DY – The TBL is an excel spreadsheet that is a developed tool that is currently being reviewed. Once reviewed values need to be entered, these numbers are a sliding scale and behind that is a number, not a sum of which is the better outcome. Then there will be stage gate questions, these questions will be exactly the same for each item. The assessment will come up with which of the three options is the better option to move forward with.

Comment	How would you work out if the option is supported by local landholders?
Response	Andrea – This comes from previous discussions with landholders. It is based on a balance to make sure we have a broad section of the community.

FURTHER DISCUSSION

Comment	JS the updated Geotechnical report has been updated, it reads that over 25% is not long-term stable. The latest report is contradictory.
Response	DY – we will sit down with you after this meeting and run through the reports with you to

Comment	So, someone in Government will read the TBL and see that it's supported by local landholders?
Response	Andrea – if there are loud voices saying that they don't agree, there is a balance
Question	JS – How does this work with neighboring properties as they have different impacts?
Response	DY – It will say this is the score, this is the evidence and has to be supported by rationales. The government won't have access to look at the discussions between people as these are confidential.
Question	What are the other avenues that the Government can see Mick and John's view?
Response	Once the application is submitted the regulators should talk to landholders. Idemitsu must submit something no later than March 2019. We can't make them have a discussion with you, though can make them aware that you want to have that discussion.
ACTION	On behalf of Mick and Marg Shaw, find the process they can take to have a discussion with the regulators.
Response	MS – Our concerns are the ponding. At the end of the day when the mine is closed, what will we be left with. At the end of the day we could be liable for problems that you have left, and we don't want that. I want Idemitsu, when they give the country back to these people, Idemitsu should be the ones to have to fix it. We felt that this was the only place we could put our concerns out to the wider community.
Response	EM – We will take this conversation offline for further discussion.

MEETING SUMMARY

The chair concluded and thanked all members for attending today and asking lots of questions. Apologies that we were unable to go on the bus tour due to the weather.

MEETING CLOSED

Close the meeting – 12.42pm

Next Meeting Date: DY to provide a date to EM.

SUMMARY OF ACTION ITEMS

ACTION	DY - Update and reissue landform reports to show the new cross sections for F & Y Pit
ACTION	DY - On behalf of Mick and Marg Shaw, find the process they can take to have a discussion with the regulators.