

MINUTES OF MEETING (Draft)

STRATHALBYN COMMUNITY CONSULTATIVE COMMITTEE

Thursday 19 February @ 7.00 pm
Senior Citizens Hall, 6 Parker Avenue, Strathalbyn

PRESENT:

Charles Irwin (Chair)	Sue Jettner	Malcolm Twartz	Adrian Pederick
Ann Woolford	Mark Dale	Fred Carrangis	Ben Brazzalotto
Matt Osborne - Sec	Karen Rogerson	Mike Farrier	Julia Currie

DEPARTMENT OF STATE DEVELOPMENT (DSD) (PREVIOUSLY DMITRE):

Antonia Scrase Andrew Querzoli

TERRAMIN:

Matt Daniel	Joe Ranford	Mike O'Reilly	Katie Fletcher
Martin Janes (CEO)	Stephan (Legal Counsel)		

EPA:

Nil.

APOLOGIES:

Rhonda McCarthy Peter Reilly (EPA) Greg Marshall(DSD)

Gallery – 5 people

1. WELCOME, INTRODUCTIONS AND APOLOGIES

Charles Irwin welcomed attendees and opened the meeting at 7:03pm

Apologies recorded.

Meeting is being recorded.

Apologies provided to Ruth and Don for not notifying of cancellation of previous meeting.

2. REVIEW OF MINUTES OF LAST MEETING

- The previous minutes (21 August 2014 as November meeting cancelled) have been circulated;
- Amendments to minutes:
 - Matt Daniel not Daniels
 - HDPE not HPTE – 2 references (pg. 7)
 - plants “not” going to use it (pg. 6)
 - Upcoming meeting date – 19 Feb (pg. 10)

Comment

These were the first time names have been accredited to questions, usually just a general response. Group gave consent to names attributed to questions and comments.

Minutes accepted with changes.

3. Chairman Mr Charles Irwin: Resignation / Process for Appointment of new Chair

Chair has spoken with members outside of session to explain the reasons for resignation and process for nominating a replacement chair. Chair has been in place for 7 years and believes it's time to step down.

Task for this meeting is to set in place a process for selecting a replacement chair.

As current Terms of Reference (ToR) have no reference to selecting a chair or member, it is suggested that the SCCC adopt through ratification the nomination process used by the Penrice Community Consultative Committee and included in the DSD Draft Terms of Reference Guidelines. The process is:

- Formation of a subset group called the 'Selection Committee'
 - the Selection Committee would have one representative of:
 - council,
 - company (Terramin),
 - community (SCCC) and
 - DSD.
- The Selection Committee to receive or research suggestions for replacement Chair
- The Selection Committee to recommend a preferred replacement Chair, obtain consent for nomination, then submit the nominee to the full SCCC for ratification at the next meeting.
- Much of the Selection Committee work could be by teleconference.

If this process is ratified:

- it is preferable for Selection Committee to form immediately upon closure of this meeting,
- to receive suggestions for a replacement chair over the next month,
- by next meeting (May) the Selection Committee should have met and formed a recommendation for a replacement Chair and that person should have confirmed they are prepared to stand,
- The May meeting is a handover meeting as the current Chair will not be available in August.

Comments

From past experience in similar groups the Selection Committee did not select one person, the Selection Committee sent names to Minister for selection. This separated the Selection Committee from the final decision and potential complaints of unsuccessful applicants.

This is a good point, under the Terms of Reference the members and chair are Minister appointed. Any selection would need to be ratified by the Minister, can't see why that cannot be done.

Peter Denning (Alexandrina Council CEO) is happy to provide council staff member to the committee if that is the wish of this group, provided he receives a request to that affect in writing.

Question to group – should there be Council Staff or an Elected Member on the Selection Committee?

The SCCC contains two Council Elected Members, both with knowledge of the issues and experience in how the SCCC operates.

Council does have staff members aware of how the group started, that have been kept up to date with emails received from Terramin. Peter Denning's preference is for a Council Staff member.

View of the SCCC was that the SCCC has two Council Elected Members that have been involved from the start, have the experience working with this group and are aware of the concerns. Prefer to select one of those two for council liaison. Cr Woolford was asked to continue in the role, with Cr Brazzalotto as proxy when required. Both agreed to stand. This was ratified by the group.

Group consensus on Selection Committee –

Council representative selected – Ann Woolford

Terramin - nominate CEO Martin Janes as representative

Community Representative – Mike Farrier

DSD Representative – Greg Marshall requested but defer to DSD for decision

Group ratified selection process and Selection Committee membership.

Action

Chair to write to Peter Denning outlining SCCC decision on Council representation for meetings and the Selection Committee.

4. DSD: COMPLIANCE OVERVIEW - Compliance and Inspections report

Site Inspections and Compliance updates - Antonia Scrase

- Visual inspection of site on 9th February 2015
- Inspected perimeter of tailings facility for signs of erosion in walls:
 - no erosion visible
 - good vegetation cover
- Still pumping water out of decant tower to evaporate in TSF
- Water pond area is decreasing
- Process plant has been tidied and is locked down
- Hydrated lime residue/stain on tarmac around process plant, dust cart was used to suppress dust
- Transport trucks were checked regularly to ensure management of dust levels.
- Lime Trucks were being hosed down manually
- Site is securely locked down
- Nothing else of note

Comments

Community hasn't seen any drag out issues.

Update on Reports

Following last meeting Antonia forwarded information on the progress of reports. This was much appreciated as it clarified what was available and what reports the SCCC were waiting for.

Website was checked, the following is currently missing/needs correction

- Meeting advice changed from February, 20 2015 to February 19, 2015
- August Terramin presentation is missing
- QER up to December to be added
- Minutes of this meeting to be added
- 2014 compliance report (due end of March) to be added once approved
- PEPR, Care & Maintenance and Closing Plans to be added once approved.

5. TERRAMIN: UPDATE AND Review (presentation available on website)

Update – Joe Ranford

- Management & Monitoring continues,
- QER was good, it was pointed out that seepage figures were left out, these will be provided tonight for discussion,
- Mine Closure Plan submitted,
- Environmental Management Plan for Closure, Rehabilitation and Earthworks has been prepared. Will be submitted once other approvals have been granted.
- Phytocap modelling, test work and risk assessments are complete, following a lot of back and forth between the consultants and Terramin.
- Reiterate that the design criteria for the Phytocap are the same as the HDPE liner. Expert presentation to the SCCC advised the best way to close the TSF is a cover system. HDPE is one type.
- As the seepage graph shows even HDPE liners have the ability to seep water, it does not provide a perfect seal. The Phytocap has the same design criteria with a better environmental outcome.
- The Land Management Agreement (LMA) will be in place specifically for lease condition 69, which protects against development that may affect the integrity of the TSF cover design.
- The details of the LMA and how certain criteria will be applied to the land holder will come into effect once the cover system has been proven to be working and DSD decide the lease

criteria have been met. Once these conditions have been met the LMA conditions can be applied to land title. Up until then the company (Terramin) is responsible for the land and its management.

- The seepage drains graph shows total flow is the lowest it's ever been, as expected as the tailings dam continues to dry. Important to note that these drains do occur under the HDPE liner, so there is moisture that does get through the HDPE. This is the same with a Phytocap system: there may be some moisture that gets through.
- The differences are that the Phytocap:
 - Is based on a natural design,
 - it will be self-healing,
 - it will provide protection for mass ingress of water and prevent bathtub effects (the same as the HDPE liner would prevent),
 - it has a substantial soil base which trees and plants can grow in and further protect the cover system.
- Lime storage continues, we are monitoring dust,
- Update on Bird in Hand Programme:
 - Company is focussing on putting in place the Angus Mine Closure Plan, but
 - Terramin have an approved PEPR for Exploratory drilling at Bird in Hand
 - Plan is to treat gold at the Angus site, need to work with this group and government
- Constructability trials are planned to test Angus TSF cover design once the phytocap cover system is approved. We will conduct a trial (30m x 30m) on top of tails. We will be recording data, planting out and monitoring effects on vegetation.
- It would not take long to set up the trial, it would go on until site goes into closure (could be 2-5 years or longer). It is a constructability test to see how to construct the Phytocap. It will not be a go/no go trial of the Phytocap option.

QER – key issues / questions – Matt Daniel

On Pg 13 there's a graph of rainfall and arsenic. It shows at the end of the graph the arsenic was going up, it had not peaked. I want to know if it did continue to rise.

No. It did peak; we retested as soon as we received the results. This came in at 0.006? We have tested other nearby bores. Results should be received within two weeks. Data has been sent for review by ATC, as per annual compliance report (TSF water data, bore data and weather data). There doesn't appear to be a correlation between lead and zinc amounts at the same bore during the period with the high arsenic levels.

What might have happened to give that reading?

We think it's related to a very dry winter, there appears to be a pattern between arsenic and soil moisture and weather condition.

Is it something you've seen before in the life of the mine?

We have seen a pattern. It only really comes out following really dry periods. Not a strong correlation, just an observation really.

We are testing tailings surface. This is not especially acidic, tested 26 sites every three months, then sent to O'Kane for review.

When testing surface Tails, is that on beach or at the water tower?

On beach where it's dry. We can only gather tests where it's safe to do so. The area around the decant tower is still quite muddy and there's a risk someone may fall in.

So we don't know how acidic it is at the decant tower?

The water at the decant tower is 6.6 as at late December. The mud is not known.

I would expect it to be less acidic than at the beach because it is not getting oxygen. It needs oxygen and water for the acidic reactions. As it dries out it will become more acidic. We have spoken to O'Kane's geochemist, who says the acidic response in the TSF is as expected. It is forming a good crust on the surface. The better the crust the less oxygen and water can penetrate.

On the basis that it is a predictive expert opinion, is it possible to get a crane or boom lift to safely collect a sample for testing?

We could do that, but it's all underwater, it's not oxidising. It's the oxidising effect that causes the acidification. For those points that were provided, for the last eight months there is a very flat trend line for acidity. We are making sure we record everything, we're measuring the water from the decant tower and decant pond. There is no reason for any increase in acidification from a sub aquatic area. It could even be less because of the lime we put in there. It is underwater and not oxidising. The lime is being consumed in the process.

All points for the graph are provided on page 16.

We are seeing the acidity stabilising, it is not particularly acidic.

So DSD don't want any testing of that decant tower outside of the water sampling?

We are taking advice from O'Kane, who are happy they are not taking samples from that area. They are basically saying that this area, is the last point that is still wet and you'll find the most acidic points on the beach where it receives the highest amount of oxygen and least moisture.

Summary of Regulatory Process and PEPR/Closure Documents for review

Terramin – Matt Daniel/Joe Ranford:

2006 – Mining Lease Proposal approved.

2007 – Mining and Rehabilitation Program – SCCC included in consultations

2007/8 – site was constructed

2012 – changes to Mining Act and Regulator (PIRSA to DMITRE)

– MARP changed to a Program for Environment Protection and Rehabilitation (PEPR) new outcome criteria developed to meet legal requirements.

– five subcommittee meetings – worked through the criteria tables

– Appendix E (Closure Plan) identified the HDPE liner as the TSF cover but recognised the additional work required. TSF option plan gave flexibility to investigate cover options

– outcome criteria set in MARP were basically adopted into the PEPR except for those changes identified with the subcommittee

2013 – entered Care and Maintenance in October.

– Care and Maintenance Plan completed and submitted to DSD

– revised Closure Plan based on work completed by URS whereby Phytocap cover system principles were further explored.

– URS provided presentations to Terramin and concept presentations to the SCCC.

– Closure Plan submitted to DMITRE in October 2013

Closure Objectives (carried forward from the MARP and other previous documents)

- established a set of completion criteria which will demonstrate the successful completion of the rehabilitation and compliance with relevant lease conditions:
 - received significant feedback from DSD and EPA on Closure Plan
 - in Care and Maintenance pending approval of Closure Plan

Closure Risk Assessments

- are international standards
- we utilise Australian risk management standard for internal risk assessment
- Failure Modes Effects Analysis workshop scheduled with O'Kane, DSD, EPA, Australian Groundwater Technology and URS to further investigate risk assessment strategies
- Framework has strengthened risk assessment process and forms the basis of the Closure Plan.

2014 – revised PEPR with Closure Plan was resubmitted in February 2014. There was a commitment to the Failure Modes Effects Analysis table.

– the TSF cover design, box cut technical report and draft LMA were outstanding.

– PEPR with completed Closure Plan was sent to SCCC in December for review, received feedback from Regulator and O'Kane, particularly on the cover system.

– resubmitted with updated closure monitoring, draft LMA, TSF conceptual Phytocap report and box cut geotechnical report.

Outcome criteria tables discussed.

Discussion on Environmental Monitoring Plan and Ecosystem Function Analysis (EFA)

- Introduced in 2012, are a holistic approach to monitoring aspects of revegetation and rehabilitation.
- Industry wide standard used in land management and mining.
- EFA referenced throughout outcome criteria tables.

Summary of high level changes

- Closure criteria
 - erosion – EFA and photo monitoring
 - vegetation – EFA and photo monitoring
 - dust – linked to EFA
 - ground water – monitoring 3 mine bores and 5 regional bores
 - surface water – monitoring 3 samples from 1 site up stream and same downstream.
 - acid and metaliferous drainage – have TSF and mine void specific detailed monitoring
 - soil contamination, silt and storm water – incorporation of greater statistical rigour and detail

Closure Plan ongoing work

- calibration of mine void ground water model using field data collected over past 14 months
- final engineer design for TSF cover within a year of approval of Closure Plan
- Draft Environmental Monitoring Plan will be finalised and submitted when the outcome criteria tables are approved by the Regulator.
- LMA will come into effect once outcome criteria are met.

Process to closure

- Announce closure
- Final TSF cover design
- Earthworks phase
- Rehabilitation and revegetation phase (2-4 years)
- Monitor and manage land until Regulator agrees criteria tables are all met
- Monitoring cannot cease until approved by the Regulator

Can land ownership change before these are achieved?

The land ownership is on the title and these criteria are on the lease. We as the owners have the responsibility. We would have to find someone to take on those responsibilities of lease conditions if we were to sell the land. So it is most likely that the ownership will remain with Terramin until the lease conditions are satisfied. Terramin have a bond with the Regulator as part of the lease. Until the lease conditions are met the bond will not be released and the land will remain the property of Terramin.

The LMA will apply conditions to the land title once all lease criteria have been met. Anyone that purchases the property will need to comply with those conditions.

Is the LMA over whole site or just the TSF?

The LMA will specifically apply to the TSF.

So the two (TSF and remaining property area) could be physically separated.

Yes.

So if someone came to you and said I'll buy the mine site but you keep the TSF, there's a possibility there could be a discussion.

Yes.

So are the Regulators likely to let you out of the whole lot or only a portion?

I doubt the Regulators will let us out of anything. They will only let us out once the completion conditions have been satisfied. The bond will stay in place as security over that land until the completion conditions have been met. We like to think that everything will be done as well as possible and the Regulator will release the bond. However this is very unlikely to happen in the short term.

Terramin have extended their Extractive Mineral Lease, proposing to use the site for building materials. What does this mean for the site?

This does allow us to quarry materials, which could be used on the site. It provides more flexibility to do things in the future.

Terramin's ASX statement said purpose was for economic gain.

To apply for an EML we have to put together an economic proposal, and when we went through that process there was a material difference. It has always been there, we've renewed it. It's an option as it was beforehand.

Request comments from Antonia, including timelines for leases. There was a Mining Lease that expires in 2016. How does that sit with this?

DSD Clarification - Antonia Scrase:

To sell the property Terramin would also need to pass on the Lease and all the requirements that come with it. The lease does run out in 2016; Terramin will be asked to renew the lease. The lease cannot be surrendered until all the environmental outcomes have been achieved. The lease conditions are in place to provide clarity around achieving those outcomes. There is no set timeline for achieving lease conditions, it's all about trends, data and proving the environmental outcomes and lease conditions are met. Then the company can apply to surrender the lease.

We have heard of two leases: the Extractive Mineral Lease and the Mining Lease. The Mining Lease expires in 2016 and you intend to ask Terramin to renew this one. What sort of period would that be for or is it only criteria related? Does it have the same conditions as currently?

It would have the same conditions as currently. I couldn't say now about the length of time, we would want to see what work has been done and progress to date.

Is the renewal of the Mining Lease automatic?

Yes.

This community was told that there was a 10 year period. That may never have been a real expectation but it is a community expectation and that's why I'm asking that. How do the renewed Mining Lease and the Extractive Mineral Lease relate?

Both have to take into account the closure requirements because they are within the same area.

It sounds fairly open ended.

The government does not want any liability for the site in any shape or form. The focus is not on a timeline but on achieving environmental outcomes. If that means Terramin have to stay longer monitoring and maintaining the site then that's what they have to do.

But in the meanwhile they are allowed to use it as a quarry?

That is totally separate to what I'm saying. They are two separate tenements that are partially over the same area. All the disturbance related to the Mining Lease remains with the Mining Lease, any disturbance relating to the Extractive Mineral Lease remain with the Extractive Mineral Lease. They are two separate tenements. They have two separate PEPR's and different lease conditions but they do need to consider each other.

The past Minister stated and I believe it's a lease condition, that if you extend a lease past the 10 years you have to go through the PEPR process again (including community engagement and a range of other things). It's a completely new PEPR. Is that your intention?

It could never be a completely new PEPR because you want them to take into account everything that's there already. This is the process we are going through.

I am just quoting what your Minister said.

He may have meant another version of the PEPR rather than a completely new process including wider public engagement.

But will you actually have to go through the whole process again? That's what was promised!
That's what we're doing now.

I'm guessing what you're saying is the Minister didn't quite get it right?

I wouldn't comment, but I would go as far as to say that we are going through a whole PEPR process now. Every time they're asked to submit more information we review the whole lot again. We do not just request an update to one bit, we look at the whole process and sit down with the community group and see what you have to say and you provide comment. We are going through the whole PEPR process again.

But not involving the wider community as such?

We (the SCCC) are here representing the community. You have the documents to comment on. This is part of the process we are going through now, isn't it?

It depends on how the process works. As one Mining Lease finishes and is either extended or reissued, doesn't it follow that there is a new PEPR, as opposed to an ongoing PEPR?

A renewal is not a new Mining lease, the current PEPR would carry over in a renewal situation.

But I'm sure that is what the Minister said in the original conditions and promises.

DSD: I can't comment on what the Minister said.

I would suggest that it's more of a live process we're going through and it's a structural change as we go. That's how I see it.

When we have gone through this (process of revising the PEPR) we have always endeavoured to ensure that we've gone back to the SCCC. I know this renewal system seems like a long time ago (2012). If we do have to renew this PEPR again, we won't have a whole new PEPR, we will base it on the previous version and be relying on you as a group to provide input into how this mining operation has been working with respect to proposed changes. Originally there were many fears of the water drying up or having trucks going through the town, having plumes of dust and people dying from lead poisoning; there was a lot of fear. People were up in arms about their concerns because of the unknown. As a group we've learned what actually happens and, sure, there have been some small issues as we went along. I think it's best that as a group we say we did put these things in place, we did ensure that the company weren't being a nuisance with extra road traffic or in extra vibrations through blasting or other things. To go back through the original open town meetings to try and get all these people fired up about unjustified fears, it would seem crazy for all the people involved, and for the company, and I don't think any of the Regulators feel like they need to be in that position.

As much as the Minister may have said something, and I know by looking at this and from dealing with a lot of these things, there was capitulation in certain areas that people have just said things to ensure that people were placated. So he may have said that but it is our intention to take the good work that was done, because there was a lot of work, time and money put into it and we apply it.

It doesn't change the responsibility of the company under the lease conditions. Even if the company no longer mines the site the lease conditions remain with the company. The Extractive Mineral Lease (EML) is completely separate to the Mining Lease (ML); you can have EML's sitting within ML's and unfortunately this has clouded this topic. As Hans pointed out, the EML is not something this group should be concerned about because the SCCC is here to talk about the ML. There is a responsibility in the EML PEPR to ensure that the place is safe, not detrimental to the environment

and the other required criteria. It is not as rigorous as the ML because you don't have the processing and the tails facility.

If mining operations start again, the scope of mining would be different to what was done in the past – deeper or broader. Presumably this changes the scope of the original PEPR and needs a re-scoped PEPR?

Terramin: Yes, we are bound by the current PEPR to those conditions. For example, if we doubled production and finished the mining in four years, we would still have to go back and re-scope the PEPR. That condition doesn't change because we're coming to the end of a particular lease.

At beginning it was stated there was an 8 year mine life. People were concerned that if a new ore body were found there would be an expansion into new areas or the application of more Mining Leases or Tenements or for production rates to increase on the site. That may be where the mention of a 10 year renewal or re-evaluation, and whether a PEPR or MARP was required, came from.

My main concern is monitoring needs to continue in perpetuity, regardless of lease conditions. The LMA needs to be a focus of this committee's discussion. Whilst the Mining Lease regulation requires the company to set the LMA up in accordance with your Rehabilitation and Closure Plan, whoever takes ownership of the TSF in the future has to know what they are doing. Otherwise we can't get early intervention if there is an issue or failure of some design. Conversations have lapped around not what Terramin have to do but what does the person who ends up owning the TSF have to do into the future. If we don't monitor it could be leaking and we would not know unless someone is sampling the bores and reporting it. What legal standing does the LMA provide to the community?

Terramin: The LMA is document that applies to the owner of the freehold land: it states that the owner will not disturb the structure of the tailings dam. That's it.

So they won't be responsible for monitoring?

Terramin: Correct. The monitoring requirements apply from the Mining Lease and the PEPR. The LMA is quite separate.

So the monitoring would cease at a point?

Terramin: Yes, the LMA is a simple document that attaches to the title of the land. The obligations to monitor are Terramin's, through the Mining Lease and PEPR. We have a substantial bond sitting with the Regulator: the bond is big enough to cover rehabilitation and long term monitoring of the TSF. The Regulator is going to say that Terramin are required to continue monitoring as long as the government requires us to do so.

In several sections of the lease the word 'indefinitely' is mentioned in respect to exactly that (ongoing monitoring). The question being addressed here is at the end of your timeline, the objective would be to check the boxes of the criteria that have been met and approach the Regulator to sign off on the lease. What I hear is that there are ongoing responsibilities that may be e.g. 75-100 years in terms of monitoring. It sounds like the LMA is not set up for monitoring, it's only intended to prevent disturbance to the TSF site. Does anyone know a mechanism to achieve monitoring?

Terramin: That's the PEPR.

But the PEPR won't apply once lease conditions have been met. There are two options:

- 1. The PEPR never expires and monitoring continues under the responsibility of Terramin.*
- 2. If the PEPR expires and the lease is handed back, then either there is no monitoring or somebody else is doing the monitoring. How is that handled?*

Terramin: It would be very hard for Terramin to hand back the lease. It is very hard for mining companies to get out of mining leases once they have them.

As a company you would be seeking to demonstrate that you have achieved all the lease conditions in the PEPR and post mine rehabilitation plan etc. If you demonstrate that to the Regulator, surely they are obliged to release the bond. The TSF becomes a title in its own right, because it's no

longer a mining lease, it would just sit as a separate demarcation on a map. I could potentially go to the company and buy the TSF, although of course I won't because I know it's contaminated and it will have the LMA on it which prevents me from putting a shed on it. Understanding that, of whose good use will this land be? If the mining company don't want it, if it gets returned to community or becomes crown land for example, where in law is there a requirement to monitor the site? This committee has this as a concern in perpetuity. It is a contaminated parcel of land that we recognise is subject to potential acid mine leakage and we don't know if that is happening unless someone is monitoring it into the future. Now the company could be offsite with their bond back because they've satisfied the stated criteria and effectively moved on.

DSD: They still own it though.

Terramin: We've set the criteria and have to go through the process to satisfy these. If there is a level of doubt that it hasn't been satisfied then the bond can be used to ensure it happens. As much as we'd like to think that we've met the criteria and the government would release the bond, it has very rarely happened, once in Northern Territory, not in Western Australia and not aware of it happening in South Australia.

Any Mining Lease whatsoever?

Terramin: Not in modern history, certainly in the old times. It comes down to the learning we've had and satisfying those criteria. If there is a level of doubt, then the Regulator steps in.

This sums up a core issue that's been a concern for the group over a number of years. It's by no means arisen from the December circulation of these papers. This group is concerned that if they project into the future e.g. 100 years and there is a leakage problem which may eventually move into a water body, who will pick it up before it's a problem and who is going to deal with it? The LMA is only there for the transfer of the freehold and non-disturbance of the TSF capping. This leaves the question of monitoring and, if needed, intervention as an unknown. That is what this group has been asking for, to my knowledge for the past 2 years.

Would it be unreasonable for this committee to seek some advice on this?

Not at all, DSD has been waiting for Terramin's proposal on these things, which we were told was forthcoming and we received that in December. We've now seen that but correct me if I'm wrong but as yet there is nothing within those documents that address what I just talked about.

As the Regulator, DSD is responsible for the technical aspects of reviewing these documents; the SCCC is just a community advisory group. We understand there are questions about the LMA and the nature of the wording. There are issues there that have been raised before and at this meeting and those issues have yet to be addressed.

But there is one outstanding issue that I haven't heard addressed yet. We are talking about the Closure Plan. The company has said that once criteria are met the Regulator can approve satisfactory completion but we are talking about something that will be in the landscape for beyond 100 years. The modelling is only out to 100 years.

Terramin: The modelling is based on 100 and it is out to 1000 years. "In perpetuity" is out to 1000 years as far as we're required. The intent of the design is out to 1000 years. What everyone is not getting is that the Regulator has to be sure that all the conditions are met. If they're concerned about any leaking or issues remaining the Regulator will not provide the closure. It comes down to the Regulator in conjunction with the community being able to agree that the conditions have been met. I don't know if they will ever do that because I don't know of any Regulator that has done that. But that is the mechanism that controls when the mine site is complete. I know everyone wants more information but the criteria have to be met to complete the mine.

We were told that HDPE liners have a 1000 year life, now saying 15-25 year manufacturer guarantee, so is there any likelihood that the liner at the bottom of the TSF will fail? If that's the case there's the likelihood you're going to get more ground water contamination.

DSD: The first graph Terramin presented [tonight] showed clearly that there was leakage through one of the HDPE liners underneath. So they do leak. The idea of putting the phytocap cover on is to prevent net infiltration. Meaning it is stopping the water entering and the tailings would gradually dry

up. There will be some seepage, that's why the ground water modelling was looking at seepage of the tailings into the groundwater and if the environment could handle it. As far as I'm aware everything is supporting what Terramin are doing at the moment. I will be able to provide more next meeting when everything should be finished and we'll be able to give you a download of what we think of the PEPR as a whole.

6. DSD Response: Compliance Review Of Documents To Hand (PEPR, Closure Plan) : Antonia Scrase

Status of Current Assessment

- Ongoing PEPR assessment, copies sent to O'Kane, EPA and DSD
 - Initial feedback from O'Kane suggests they are generally heading in the right direction however the review is not complete.
- DSD's response to the Phytocap will be that it's up to company to select the strategies to meet their environmental outcomes. DSD is supportive of the Phytocap and believe that it is becoming best practice over HDPE (that is manmade, has a lifespan and only a 15-25 year manufacturer guarantee). DSD is supportive of further investigation of the Phytocap.

DSD Expert Reviewers – Panel

- Background to the re-appointment of O'Kane Consultants:
 - Originally Richard Jewel – part of waste expert panel.
 - Following a review last year we decided we needed a larger array of expertise at our hands. We went out for Geochemistry, Geotechnical and a few other disciplines. Richard Jewel was no longer part of the panel when we went out for review
 - We went with O'Kane for this project because he is a world leader in cover design and has a very good Geochemist within his team.

Mine Completion

- Mine Completion and Closure is the task.
- The PEPR and Closure Plans are live documents and it should be continually updated to ensure you're travelling in the right direction.
- We don't go to timelines because we think that would result in problems and longer term risks including the potential of Government holding liability.
- We are solely based on the achievement of environmental outcomes and performance of design to achieve those outcomes.
- The cover and the constructability trial will be monitored, there will be moisture probes set at various levels within the cover design.
- The recorded data should be validating their model, if it doesn't they will have to readjust their model.
- The constructability trial will also look at the material properties once placed.
- DSD support the trial and believe it is really important that the trial is undertaken.

Lease Condition 69 – LMA & Responsibility for the site

- DSD have been investigating the LMA with Crown Law, additional work is required.
- I understand the concerns and worries raised about long term monitoring and getting an early warning system if things were to go wrong.
- From initial investigations the responsibility for the LMA will lie with the Minister for Planning, DSD are starting engagement between Ministers at the moment to get the Minister to accept the LMA and have it on the Certificate of Title.
- The LMA only comes into play once the lease is surrendered, when all criteria are satisfied. To reiterate, if the Regulator has any doubt the company will need to continue to monitor the site.
- All the monitoring will go back to validating the models within the PEPR. If they get data outside of what's in the models they will need to investigate why it is happening and the potential impact it could have that would be different to what is in the reports.
- With respect to long term monitoring, it's not just a case of collecting data, it is about proofing what has been provided in writing.

- This is something we will be scrutinising. We will be keeping our experts on to ensure that level of detail is maintained.
- Ultimately the landholder will be responsible for the ongoing maintenance but the LMA can have a document attached to it. This could include the details behind the design and the maintenance on what may need to happen, but monitoring was not in the current draft of the LMA. It's something that we can keep discussing.

Question/comments

I'm encouraged by what's been said. If there is no case law that states you can attach a monitoring requirement to a LMA, then let's create it and see what happens. What's the worst that could happen? It won't be monitored which, as it sounds, is what is going to happen now after the mine closure when the Regulator no longer has responsibility.

I know it's a significant amount of time but I don't imagine the town disappearing in 200 years.

At the end of the day the Government is the ultimate guarantor, they don't want another Brukungu.

That's what's on my mind. The last thing we want is another Brukungu on the outskirts of Strathalbyn.

The minute they release Terramin from their obligations the Government is taking on that risk.

This is something that is being discussed not only here but in other jurisdictions and in other countries where different methods of this passing of ongoing liability is being looked at. It's not something that is unique here, and we're all struggling with it. It's not something we dismiss, we are fully aware. We do not want another Brukungu, spending millions tidying up for someone else again. Likewise mining also don't want that because it gives them a very bad name.

Equally if you have an LMA on the property and it's passed onto a local farmer who decides to put cows in there, if twenty years down the track he decides to put a shed in who's going to monitor that?

That sits with the Minister and Local Council. The Council will monitor development applications on the land and compliance with the LMA.

So why doesn't the council pick it up and have it as a park, it's a lot easier?

Whether it's a community asset or not my primary concern is it needs to be monitored beyond regulatory requirements, in the true sense of perpetuity.

Chair: There has been a lot of progress and focusing on what matters. We're starting to hear some of the answers. We've had a very clear presentation from Terramin, in terms of how the current discussion fits within the last 10 years, which sets the scene. There is still work being done on the LMA. This is an evolving beast as are the Closure conditions. Closure is an open ended question and Antonia has been very clear that there is no set date on it. In the back of the closure plan there is a Gantt chart which was developed for a HDPE liner. That isn't viable but it shows what happens when you reach criteria. We should be clear that it does not have an end date. We are hearing from the company that it is unusual for these to have an end date. The discussion tonight has given us a clearer idea of the issues and the community have raised concerns about what happens after closure.

Meeting break 8:50

Meeting resumes 9:03

Chair: So, where are we?

In essence there is work to be done on the LMA because DSD is talking with Crown Law and that discussion has not finished. The discussion will need to focus on whether the LMA will cover only physical encroachment to the TSF site or, as currently stated in the Mine Closure and Completion Plan draft, any ongoing land management requirements including fire, weed or pest management and other issues as required. The latter is what is stated in the Mine Closure and Completion Plan

draft at present and those that have read that and the LMA have found a hole between the two approaches. The hole could be fixed in a number of ways but we have to await advice on where that is going. I don't see much purpose in pursuing that further tonight. It would be good to have progressed this at least as a strategy if not in final wording by the May 2015 meeting.

The criteria for the end of lease has been covered as well. There are two leases: the Extractive Mineral Lease (EML) and the Mining Lease (ML). They sit concurrently on the same block of land. To clarify these, are the boundaries identical?

DSD: No, they are different. The EML is a smaller area, confined to the central domain. It does not interfere with the TSF domain or the dams on the other side of the road.

This group has not dealt with the EML at all, we have been informed of it but have not provided comment or seen the conditions of it. The EML is not part of our Terms of Reference (ToR), which is why we haven't discussed it. If there were overlaps that we should know about perhaps it would be sensible if we were told, but fundamentally we can ignore this topic.

The Closure Plan states the Phytocap is the preferred option of the five put forward. On that basis this group has asked questions on Net Percolation (or the bathtub effect). Those questions have not been entirely covered around this table. DSD, the EPA and O'Kane are all still reviewing that document. They are the technical advisors; we are not a technically equipped committee, and I would suggest it is not worth discussing those things at great depth while that review is taking place. Our concerns on Net Percolation should be answered as part of DSD's review through O'Kane when DSD next report of their status of review. These questions have been raised many times and should be answered next meeting, presuming the review will be complete in time for our next meeting.

Are there any other concerns regarding the document?

One of the ML closure requirements is to re-slope the Box Cut walls, does that effect EML mining activities?

Terramin: The same final slope is required. It may be the case that the dirt is removed for the extraction of minerals. Once complete, soil would be returned to bring the slope back to the required angle.

Does this cause DSD problems?

DSD: Yet to be assessed, they have to resubmit that PEPR. We have to take into account what has been put forward in the Closure Plan and PEPR.

Regarding cover options for the TSF – Appendix kk 'Tailings storage facility cap options assessment'. On page 13 of the URS report it says for modelling purposes the condition of poor placement quality reflects installation of HDPE with a "certain number of wrinkles on a poorly compacted with low permeability soil with a surface that does not appear smooth". What is a certain number of wrinkles? Further to that the modelling is suggesting that the installation of HDPE liner would be not reflect the actual installation. The model uses a poor standard of work for HDPE modelling. Another concern is the Phytocap modelling uses a default growing season ranged between day 357 (late December) through to day 317 (mid November). As part of the sensitivity analysis the growing season was changed to begin on day 1 and continue to day 365. That suggests the growing season is all year round. My perspective is the risk analysis of the HDPE liner has fundamental problems. The company claims in the final Closure Plan that there is evidence of Phytocap options working, I would like to know where, and particularly are, they working in a similar situation where a basin is lined with HDPE?

Terramin: The capping is there to stop Net Percolation into the ground. I understand there is a concern on what goes through the two HDPE liners and clay layer that was designed to be effective without a HDPE liner. If water does not penetrate the cap there will not be a bathtub effect, if it does penetrate there will be a bath tub effect.

So are there examples of systems in place that have HDPE liners at the bottom?

Terramin: Modern rubbish dumps have a solute catchment system underneath. It does not just sit on clay or ground. EPA requires a form of solute catchment so if there is Net Percolation through the cap it is captured and taken, treated or monitored.

The material differs; it can be HDPE or Geotech fabric. So these are comparable in that sense.

It is a problem because your appendix cites McLaren Vale, saying that in 2010 there was Net Percolation there. 2010 was wet but not that wet. There are examples of these things happening.

DSD: DSD have taken comments on notice.

Terramin: The 360 days was used in the sensitivity analysis. You build a model to test extreme events, e.g. if it rains for 365 days a year, what happens or if there's a drought for a year, what happens.

I can accept that if it's part of a sensitivity analysis. What about the default growing season? It states a growing period of 317 days - this concerns me. I am worried about that modelling because I do not know a farmer that would put a crop in for 317 days of the year.

Terramin: If it's a perennial crop its growing all year. It could be native grasses and trees.

It takes into account summer rains and weeds. It's not a set period.

In relation to the models use of poor conditions when describing the installation of the HDPE liner, if we were to lay a liner on a table we would have very good conditions. When considering laying such a large area with heavy machinery, even using rollers – we will be compacting the tails. The conditions of that, in the scale of the model, are given as poor. If you walk over the exposed liner today, which was very well laid, you will see those ripples. That's why they chose the poor classification. It's relative to the modelling.

URS have used a technical reference to support that classification.

I accept that explanation however I still have concerns regarding the growing season.

The crucial thing is not the growing season. The crucial period is when rainfall is more than evaporation. Dealing with the extra water is the issue. I believe that a natural clay base is better than a HDPE liner. The argument is not about cover type it's about how to manage those winter rain events.

DSD: That is why they're called store and release covers. The intent is to deal with that excess and the majority of events, under which it has a highly likelihood that it will not fail and will be able to handle the small leaks that may occur in large events.

We know the basin leaks. That is why I'm so concerned with the capping and Net Percolation. Do we go with a natural or manmade layer?

DSD: There was a period of time when this was discussed and a couple of members of the SCCC attended a conference and talked to the experts reviewing this. These concerns have been expressed and discussed in the past. On meeting the experts those SCCC members were more confident about the Phytocap design.

It will also cost the mining company less I would suggest?

Terramin: No, it is more expensive to do a Phytocap cover. It was selected because it is the right thing to do. This is a unique scenario that does not have a direct comparison. The closest comparison we know of is in McLaren Vale. We weren't able to just apply that design, the design is different. All the work we've done is to ensure we do our best under the mine's specific circumstances. The Regulator has never said we must do this. They want us to meet our criteria. This is the best way to meet that criteria and the right thing to do.

I'll retract that statement tonight and am aware of the effort the company goes to, but in those comments is a reflection of what I would hear from community.

Ultimately if we do a good job, we will hopefully one day get away from the responsibility for it. If we do a cheap and nasty job or take a short cut we'll be wearing it for the long term. It's an investment.

There are still things pending, reviews that are happening and you should expect to hear more at the May meeting.

I did see an earlier slide that suggested the crushing plant would be used to crush ore from a mine offsite. If that happens the existing tailings dam would be used for the separation process. If that is the case what we're talking about now may not happen for a while. Who gives approval for offsite ore to be crushed here?

Chair: The key part of that statement is 'if'. The approvals you are talking about is with respect to the Bird in Hand Mine at Woodside. It has to go through a proving up phase: they are currently drilling holes to confirm the reserve size. It is not yet even a resource. If it turned out to be a large enough body of ore at the appropriate concentrations it would go through the appropriate PEPR process. As part of that there may be implications for Strathalbyn. If and when there are implications defined for Strathalbyn and thought appropriate from the Regulator then this group would focus on that. That will happen quite a long way down the track and I don't think the company is in a position to put a date on that. There have been hints to the ASX but nothing more. We maintain our line as this group that, it is not our baby yet. That has been my position for two years and I don't see any reason to change that.

7. Terramin: Community Engagement

Newsletter; Website and any other publicity

- Steward Jackson a previous worker at Angus is now working at Mt Barker Tafe. Assisting Mining and Civil Construction training team and course materials. An old bucket from Angus was donated to help the Tafe students in their studies.

8. Other Business/Round Table Discussion

Ratification of Council Representative

- Council has written to Chair asking 'do we need, a council representative on our committee and if so who should it be'.
- Traditionally this was provided through Ann and via a stand in when she was unavailable.
- Trent Rushby was the stand in until recently.
- The SCCC is now in a situation where Ben Brazzalotto and Ann Woolford are both Council Elected Members.
- Following discussions with both it has been suggested that Ann would continue and Ben would be her proxy.

Group approved this by consensus.

Action:

Chair to write to Council and confirm Ann Woolford as council representative on SCCC, Ben Brazzalotto as proxy.

Update on new Terms of Reference

- The July 2014 Draft Terms of Reference (ToR) Guidelines (introduced as Final Draft) were provided to Chair.
- Chair believes additional work is required and has provided comments to that affect.
- The principle issue is the role of the SCC as an advisor to the Minister was not mentioned.
- This was found to be a guiding light for the purpose of the group. It is fundamental to any end game.
- If the SCC found itself in the position whereby the company, Regulator and community were at a point of conflict and could not resolve themselves, the SCCC would advise the Minister who has the ability to make a decision taking into account the public (as an elected representative) and head regulator. Without this the matter would be thrown into the public

arena, which would make a CCC pointless in the difficult circumstances that justify its formation.

- This is an important scenario and the current Draft ToR does not make mention of this role of the SCCC.

Other issues with the Draft ToR include:

- Selection Committee not having DSD representation
- But there have been improvements as a result of earlier feedback: DSD is now to turn up when required by the Chair and the second half of the document.

Chair is shocked that it has taken 3.5 years to get to this point, for what is a relatively simple document. Furthermore, this Group was advised in August 2014 that the draft would be circulated, but this has not happened to date. Chair advises members to make comment once the document is circulated. It would be good to have the ToR in place for the process of selecting a new chair. Chair has held position for 18 months longer than expected waiting for the ToR to be in place for that reason. It isn't.

Chair stated he is also Chair for Penrice CCC and will remain in that role for a further 12 months at the request of the (new) company there.

2015 Meeting Schedule

May 21, 2015 - August 20, 2015 - Nov 19, 2015 - Feb 18, 2016 - May 19, 2016

Round Table discussion

Company ownership – Terramin has been through phase of financial restructure, strengthening company finances. Debt levels have halved since the start of last year. The majority of debt is now held by the major shareholder. Company is in a very stable position. Recent restructure of major shareholder, with shares distributed between this partnership. We are progressing on our Algerian mine approval, meeting with Algerian government next week. We have land in Woodside; we are pushing towards proposing to mine at Woodside that would involve trucking ore to Angus for processing, but this needs lots of approvals and environmental work.

Occasionally I have been approached by media outlets. I am not responding, I won't and it's not my job to talk about it. It's the Chairs.

Otherwise, all points have been addressed.

9. FUTURE MEETINGS AND CLOSE.

Thanks to secretary, Don and Ruth, and volunteers for coming tonight and for putting in the considerable effort to look through the 1,000 pages of documents under review.

Again, apologies to Don and Ruth regarding cancellation of last meeting

We will convene the selection committee within the next few weeks.

Meeting closed 9:39

Next Meeting May 21, 2014, at 7:00pm, Parker Ave. Hall.

Action List

Terramin	Carried over from previous meeting Terramin to provide Executive Summary of cover options, consultant reports and expert opinions and an example Land Management Agreement framework prior to further discussion at the next meeting (November 2014)
Terramin	Carried over from previous meeting Check with geochemist what sulphates are being measured in underground water.
DSD	Carried over from previous meeting Finalise standard TORs, circulate as soon as possible and report back to next meeting.
Secretary	Update previous minutes.
Chair	Chair to write to Peter Denning outlining SCCC decision on Council representation on the Selection Committee.
Chair	Chair to write to Council and confirm Ann Woolford as council representative on SCCC, Ben Brazzalotto as proxy.