

**MINUTES OF MEETING**  
**STRATHALBYN COMMUNITY CONSULTATIVE COMMITTEE**

**Thursday May 20 2010**

**@ 7.00 pm**

**Senior Citizens Hall, 6 Parker Street, Strathalbyn**

**PRESENT:**

|                       |                 |                    |               |
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| Charles Irwin - Chair | Fred Carrangis  | Susan Jettner      | Julia Currie  |
| Barry Davis           | Ben Brazzalotto | Adrian Pederick MP | Anne Woolford |
| Mike Farrier          | Gallery 12      |                    |               |

**PIRSA:**

|              |                   |                  |
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| Hans Bailiht | Henry Andryszczak | Holly Cowan- Sec |
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**TERRAMIN:**

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| Anya Hart | Greg Cochran | Robert Howie |
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**EPA:**

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| Peter Riley | Daniel Radulovic |
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**APOLOGIES:**

|              |                 |
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| Tony Sheldon | Ben Brazzalotto |
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Meeting commenced at 7.10 pm

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| <b>1.</b> | <b>WELCOME BY CHAIRMAN</b>   |
| <b>2.</b> | <b>APOLOGIES</b><br>Apologies were accepted, as outlined above.  |
| <b>3.</b> | <b>REVIEW OF MINUTES OF LAST MEETING</b><br>Corrections to February 18 2010 minutes: <ul style="list-style-type: none"><li>- The term <i>tailing stand</i> should read 'tailing dam'.</li><li>- Page 2- <i>concentrate shed doors have experienced mechanic issues</i> should read 'mechanical issue'.</li></ul><br>February 18 2010 minutes accepted as true and correct. |

4.

## REVIEW OF LEASE/MARP COMPLIANCE STATUS

This item is included to show that PIRSA is doing its job as regulator and to communicate any community concerns to both Terramin and the SCCC.

Report given by Hans Bailiht – Principal Mining Regulator - Metallic

- A number of meetings have occurred between PIRSA and Terramin since February including four based on water management. PIRSA have conducted two site inspections- one to inspect the paste fill operation and another underground.
- Site is still non compliant as far as TSF water is concerned.
- RL of the water 20/05/2010 was RL 69.15m.
- Tailings dam – some of tailings are now turning acidic as expected.
- Paste fill operation- some cement leakage to the environment from mixing truck silo. Terramin advised that this would be repaired ASAP.
- TSF wall has been aerial seeded.
- No tree planting or replacement of trees has occurred for this season.
- Waste rocks at the toe of the TSF wall need to be cleaned up as part of progressive rehabilitation.
- Marker poles on the TSF wall to indicate location of where the double liner stops still have not been put in place.
- The existing concentrate shed doors have been operating as required even though the new automated doors are not yet installed.
- Many rabbits living in the waste stock piles. PIRSA assumes a baiting program is currently place.

### Discussion points:

- No watering of TSF wall has taken place since seeding.
- Community members voiced concern that the tailings dam has been non-compliant for almost 12 months and questioned whether PIRSA was happy with this situation. PIRSA expressed concerns about the tailings dam water level which is required to be reduced asp.
- Terramin is working towards a larger capacity RO plant on site for more efficient water management.
- There is some concern that the concentrate shed doors have not yet been replaced. The replacement of doors tender is complete and capital expenditure approved but tender has not been awarded. A management program, close monitoring and greater ownership has meant the doors have not presented an issue and PIRSA has no issues providing that the existing concentrate shed doors are operational.
- The acidity of the tailings dam is not an issue at this stage.
- Voluntary Environmental Improvement Program (EIP):
  - Off site lead impacts less than previous Summer but EPA still not comfortable with current levels.
  - No clear idea where lead dust is coming from. Assuming fair component from the concentrate shed however some may be coming from the ROM pad. EPA would like to see some chemical analysis of what is in the catchment trays - lead zinc ratios and micro components to see if can start fingerprinting the material that is going off site.
  - The program has run its course- there has been a positive effect but not a completely satisfactory effect.
  - Focus of management is around the concentrate shed- however the source of lead still urgently needs to be determined.

**5.****REVIEW OF MINE PROGRAMME/ACTIONS FOR NEXT 3 MONTHS**

Please see Terramin PowerPoint presentation, spoken to by Anya Hart.

Discussion points:

- Underground paste fill has commenced. It is working as continuously as possible.
- Estimated 70-80% of tailings will be directed underground for the next year.

6.

**QUARTERLY ENVIRONMENTAL REPORT**

Please see Terramin Quarterly Report No #13 (January to March 2009), presented by Anya Hart.

Discussion Points:

- Surface water- Hogben site was inaccessible for a period of time due to overgrown reeds; explains why no results are shown for two months. Some concern was expressed by community over the issue not being overcome sooner.
- Ground water- Discussion about reporting in line with wording in MARP *having four bores onsite and four bores offsite as separate populations*. Currently there are not four onsite and offsite bores available as most close to the top of the mine have been dewatered by the operation. Terramin are in discussions with Australian Groundwater Technology for options going forward to demonstrate compliance. This will require a variation of the MARP document in due course. Community expressed concern that this has been pending for over 6 months.

**Action: Terramin to present information on how to demonstrate compliance with MARP criteria on groundwater monitoring.**

- Noise monitoring- Eastern Monitor results show consistent trends in exceedences in night time zones against worst case scenario limits. Terramin working with AECOM to determine the source and break down frequencies. Recycling depot doesn't work at night. Potentially outside impacts. Next weeks mill shut down may help determine the source.
- Noise monitoring- suggestion that the terminology *minor excursions* is changed to 'non compliance' to align with MARP terms.

**Action: Terramin to clarify noise exceedences and steps to regain compliance at next meeting.**

- Dust modelling- community requested a more current aerial picture of workings to locate instruments.
- Hi-volume metric samplers- all total solids including lead results were within MARP criteria and EPA reporting limits.
- AH still following up draft amendment to the MARP to cover dust deposition which was overlooked in MARP criteria. To be based on initial Tonkins work.

**Action: Terramin to complete draft MARP dust clauses and present at next meeting.**

- There were three separate lead results throughout the reporting period that marginally exceeded the EPA reporting limits. To be monitored.
- Gauge 8 experienced a spike in June last year- it is thought the sample was contaminated as the results did not match with any activity in the area or the weather recorded at the time. The trend has not continued.

**6.  
cont**

- The blast monitoring system has experienced issues with charge and data transfer. A third party has been hired to manage this issue and full data sets are now available.
- A new blast monitor is going to be installed closer to the Glover's residence to better understand the impacts they are experiencing. The second monitor will feed in to the same system.
- Visible higher reading blasts (still compliant) correspond with windy conditions.
- Two weather stations are now in operation. The original high tech system is currently under repair. An interim unit has taken its place and one has been placed on a nearby residence site to be used as part of an odour study. On-site data is available, and corresponds very closely with the Racecourse data previously used.
- The rating system for drag out is subjective, and yielded some low ratings for 11 days in a three month period. Community noted MARP required "no drag out" but generally thought conditions acceptable. PIRSA is not concerned about the results and agree it is not causing any risks. Suggestion that photographs be used for the SCCC to compare ratings.
- Odour monitoring - a weather station has been placed on a neighbour's residence to track correlation between wind direction and odour being experienced. No correlation or consistent trend has been noted making analysis difficult. Terramin has invited the neighbours on site to pin point the source of the smell, but this has yet to be accepted.
- Flora and Fauna - Terramin acknowledge weeds are not being managed as tightly as possible. The consultants undertaking the Revegetation Plan also have experience in weed management so have been asked to implement a program to tackle weeds using local resources where possible.
- Revegetation activities- seeding and planting to commence June-July.
- Rabbits have not yet presented a problem to recent plantings as tree guards remain. Revegetation consultant's programme will include rabbit control.
- Visual amenity - suggestion to show comparative pictures to the SCCC in the future.
- Leakage water was tested and found to be better than ground water, so left to evaporate.
- Community - complaints register to revert to previous level of detail included over two landscape pages in future.
- Concern that community and environment reports are recorded as one in the centralised database. This is logical within Terramin.
- Definition: go-line: where vehicles are parked in a spoon drain so that they do not roll away irrespective of whether the brakes are applied or not.

**Action: Terramin to send out amended full copy of the complaints register including date and time the complaint was received and when the issue was closed out. Weed and Rabbit Management Plan to be presented to the next SCCC.**

### **Dust Environmental Improvement Program**

Please see Terramin PowerPoint presentation and Dust Management Plan, spoken to by Anya Hart.

#### Discussion points:

- Voluntary submission.
- Outlined approach to become compliant.
- Plan completed end of 2009.
- Outlines responsibilities such as sweeping roads, shutting concentrate shed doors etc.
- Dust characterisation study- samples sent to lab from potential lead dust generating sites with results to be used as controls. Deposition samples then sent from a month period to check percentage of dust from various locations compared with others.
- Inconclusive results from dust characterisation study (found to be same, just smaller particles) so no mitigation measures being implemented in to the Dust Management Plan.
- Tonkin involved from March 2010 to suggest what more could be done by Terramin and to help understand the issues.
- 30 additional dust deposition gauges collecting data March-April in and around the operating areas. Two dust track machines (dust sampling device) were shifted around to track sources of dust. Some sources have been pinpointed to produce more dust than others including around the concentrate shed doors. This is to be an ongoing study.
- National Environment Protection Measure has goals for PM10 not to exceed levels of 50 µg/m<sup>3</sup> more than five times in a 12 month period. The PM10 level on site has been recorded at 24 µg/m<sup>3</sup>.

### **Break 8.40-8.50pm**

7.

### **REVIEW OF ANGUS MINE WATER BALANCE AND TSF ISSUES**

Please see Terramin PowerPoint Presentation spoken to by Robert Howie.

#### Discussion points:

- Since October 2009 until May 18 2010 the RL level has climbed 0.26m. Underground backfill and reengineered plant water flow removes TSF inflow. The RL and surface area of the pond initially reduced through changed management however recent rain events have caused both to increase again.
- Monitoring bores show essentially a zero shift in pH.
- Two RO plants are currently operating.
- 2-2.5 L per second going to the STEDS pond while the RO plant is operational.

## 7. cont

- In excess of 7 L per second will be going to the STEDS pond when the new plant arrives. Tender for the additional RO plant is to be awarded on May 24, 2010 with installation to be complete within 8 weeks (by July 26, 2010). The existing in house plant will continue at around 1.8L per second. Total outflow will exceed 8L per second.
- Long term the STEDS pond will not be able to support this amount.
- Terramin are looking in to options for re injection and other potential of irrigation quality RO water such as the local sports grounds and the local Council. Community noted concern about disposal over winter.
- The rental plant will no longer be in use when the new RO plant arrives. This was not known by PIRSA.
- Forecast modelling indicates that during late 2012 the 20ML or 15,000 m<sup>2</sup> area trigger points will be reached.
- Community expressed concern about on-going non-compliance of TSF and the time it will take to reach the targets with no buffer for significant rain events. Noted that 41, 000m<sup>2</sup> was 300% more than MARP requirement of 15,000m<sup>2</sup> and that level remains 69m RL cf proposed 67m RL target.
- A recent Australian Tailings (ATC) Consultants report states that the same risk protection against a 1 in 100 year rainfall event would be provided if 67 RL and a nominal 36,000m<sup>2</sup> is reached in the tailings dam. This has yet to be peer reviewed or accepted by PIRSA.
- Terramin estimate to reach the 36,000m<sup>2</sup> level in late 2011-2012.

**Action: Terramin to provide predictions on when 36,000m<sup>2</sup> will be reached in the tailings dam.**

- Salinity is a consideration for the RO plant as if it is offset too quickly it can damage the process and RO efficiency drops as salinity increases.
- Evaporation equipment is being looked in to as a possibility if TSF dam water becomes too saline for the RO plant to process.
- PIRSA were made aware of the 36,000 m<sup>2</sup> issue in February and asked ATC to produce a model for them. PIRSA are so far not comfortable either way and will have Richard Jewel check proposal
- PIRSA are very urgently requiring an extra RO plant, and the backfilling operations underground to continue.
- The decant pond level decreased by about 10,000m<sup>2</sup> between January and March but is now rising again with winter rainfall.
- The carbon footprint of a new RO plant is minimal, approximately a domestic car.
- Community expressed concern that current non-compliance might be exacerbated by proposal to bring off-site ore to site. GC noted Parsons Brinkerhoff modelling still revealing complexities of plant and that "all agreed" that if company found additional ore many steps would be required prior to any approval for a change in operations.
- The new RO plant will be containerised, as is the current one, so noise should not be an issue. The new RO plant will be placed in the centre of the plant near the TSF and the existing hired RO plant decommissioned.
- The ATC Williams diagram on page 31 of the QER is barely legible however the use of greyscale around the TSF and colour line usage is easier to read than previous QER's.
- Tailings acidity is visible through brown sulphate on dry tailings. No cause for concern as it is contained within the dam.

**Action: Monthly email updates to continue.**

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| 8. | <p><b>NEW REVEGETATION PLAN</b></p> <p>Please see Terramin PowerPoint presentation, Revised Revegetation Plan #1 and Revegetation Plan Comparison, spoken to by Anya Hart.</p> <p><u>Discussion points:</u></p> <ul style="list-style-type: none"> <li>• Cooe have replaced <i>Natural State</i> and taken on the Weed Management Plan and revegetation works.</li> <li>• A slight difference in the area coverage.</li> <li>• The new Plan excludes the TSF wall as it goes beyond the scope of Cooe.</li> <li>• There are new plantings east of the viewing platform and adjacent to Callington Road.</li> <li>• Dead trees along the southern and western fence lines and a strip along Callington Road will be replaced.</li> </ul>  |
| 9. | <p><b>MINE CLOSURE</b></p> <p>Please see PIRSA PowerPoint presentation, spoken to by Hans Bailiht.</p> <p><u>Discussion points:</u></p> <ul style="list-style-type: none"> <li>• S2/65- this issue needs to be looked at now given the amount of water on site.</li> <li>• The bond money is held by PIRSA and they have the right to use it as needed including during the life of the mine.</li> <li>• The bond reduces as the risk is reduced.</li> <li>• The caveat is currently an unknown area. PIRSA now require that this is finalised by the end of the year.</li> </ul> <p>Please see Terramin PowerPoint presentation, spoken to by Anya Hart.</p> <p><u>Discussion points:</u></p> <ul style="list-style-type: none"> <li>• Ownership and maintenance of the site once the lease is relinquished is an area for consideration, especially by the local council.</li> <li>• The council would like some strong direction from Terramin to the community and the council on the timeframes for closure.</li> <li>• Suggestion that the council should consider 2014 as the option for closure. Other options will be subject to a whole new process.</li> <li>• The local council is wary of moving ahead without sure direction from Terramin. They want to participate in the process and recognise the need to plan ahead based on scenarios; however the process in their opinion should be lead by Terramin.</li> <li>• Suggestion that council planners are best placed to lead the process of considering scenarios.</li> <li>• Suggestion that a working party be formed in the near future to address the issue.</li> </ul> |

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| 9. cont | <p><b>Action: Anne Woolford to request council to consider their part in planning for mine closure, including on-going ownership and management, with a view to leading a working party to develop scenarios. .</b></p>  |
| 10.     | <p><b>OTHER BUSINESS</b></p> <p>Feedback on potential new membership of SCCC</p> <p><u>Discussion points:</u></p> <ul style="list-style-type: none"> <li>• 5 members have resigned since the forming of the SCCC.</li> <li>• Currently there are nine members plus a chair. The chair believes the group is in reasonable shape.</li> <li>• Environmental and educational interests are well represented.</li> <li>• Other areas represented: health and community services, a neighbour to the site, councillor and State Parliamentarian (albeit no longer representing the Strathalbyn area).</li> <li>• Somewhat weaker in business community linkages, public health and mining, engineering and technical analysis.</li> <li>• A call for expressions of interest was advertised six months ago. Five resumes have been received since.</li> <li>• The local MP and local Federal MP would be additional to the five received.</li> <li>• Consideration should be given to the current size of the group and ensuring members stay informed with reasonable transitions.</li> </ul> <p><b>Action: Members to inform the chair of potential candidates or skill bases that have not been included on the list that should be considered by e-mail or telephone within the next two weeks.</b></p> <ul style="list-style-type: none"> <li>• The list will be formalised within the next few weeks with an additional three member/s to be appointed by the Minister, preferably within the next three to six months.</li> <li>• Selection on the basis of skill bases and portfolios around the table with recommendations put to the Minister.</li> </ul> <p><u>Other business:</u></p> <ul style="list-style-type: none"> <li>• Terramin plan to establish a well articulated community engagement plan and as such have engaged consultant Stephen Marlow (introduced from the gallery) to help guide Terramin to a more pro active approach.</li> <li>• Several injuries have been recorded on site this quarter including three strains, a medical assist in the workshop and a pushbike fall of an employee on the way to work which resulted in complications through bruising. Dizziness was reported by one employee but was not work related.</li> </ul> |

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| <p><b>10. cont</b></p> | <ul style="list-style-type: none"> <li>• A rock fall at the beginning of April resulted in some machinery damage, but no injuries.</li> <li>• An earth tremor was recorded a couple of weeks ago which caused some confusion about blasts.</li> <li>• A lack of advertising of SCCC meetings has been noted.</li> </ul> <p><b>Action: Terramin to include an advert in the Argus prior to all future SCCC meetings.</b></p> <ul style="list-style-type: none"> <li>• Flyers have not been sent to neighbours of the mine site re: changes to blast times.</li> <li>• Uptake of Terramin's community newsletter is low.</li> <li>• The Terramin website no longer provides links or reference to the SCCC.</li> <li>• The PIRSA website is noted as not being user friendly.</li> </ul> <p><b>Action: Terramin to investigate loss of website links and reference to the SCCC.</b></p> <p><b>Action: Terramin to send copies of the QER to SCCC members at least seven days in advance to meetings.</b></p> <ul style="list-style-type: none"> <li>• Suggestion of a site visit once the new RO plant is installed and operational.</li> </ul> <p><b>Action: A site visit will take place at 4pm before the commencement of the next SCCC meeting.</b></p> <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p><b>10.</b></p>      | <p><b>FUTURE MEETINGS</b></p> <p>Terramin site visit Thursday August 19<sup>th</sup>, 2010 at 4.00pm to be followed by SCCC meeting at the Senior Citizens Hall @ 7.00pm.</p> <p>Frequencies of SCCC meetings are once every three months on the third Thursday of the month.</p> <p>Thursday November 18<sup>th</sup>, 2010<br/> Thursday February 17<sup>th</sup>, 2011<br/> Thursday May 19<sup>th</sup>, 2011</p>   |
|                        | <p><b>MEETING CLOSE</b></p> <p>Meeting closed 10.30pm.</p>  |