



## **KANMANTOO PROJECT UPDATE – MARCH 2007**

### **A Progress Report From Hillgrove Resources Limited**

#### **Kanmantoo/Callington Community Consultative Committee**

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The inaugural meeting of the Kanmantoo/Callington Community Consultative Committee (CCC) was held in the Callington Memorial Hall on the 22 March, chaired by Bob Goreing. Draft Notes of the Meeting are attached.

The next meeting of the CCC is scheduled for Thursday 19 April at 7.30pm in the Callington Memorial Hall, and will be advertised in *The Mount Barker Courier*. As always, all interested parties are invited to attend.

#### **From Hillgrove's Managing Director**

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My report for this month echoes the presentation made by Dale Ferguson at the 22 March meeting of the CCC.

I am pleased to be able to report the Definitive Feasibility Study (DFS) drilling program has largely been completed and the rigs have moved to complete sterilisation drilling of the proposed infrastructure sites. During this time drill rigs will be operating in and around the old Kanmantoo pit and may be visible from Mines Road and Back Callington Road from time to time.

Results from this work are continuing to come in and are being interpreted. Once all assays are back for the DFS drilling program, a new resource will be calculated and this will form the basis of the DFS mining studies.

The DFS is currently on schedule and due for completion between July and September 2007 depending on the availability of key consultants.

The consultants charged with completing the DFS are busy working on the various studies that will go to make up the DFS. These include:

- Infrastructure
- Metallurgical Test Work
- Mining Study
- Tailings Storage
- Water
- Power
- Process Plant
- Concentrate Handling
- and the
- Environmental Studies.

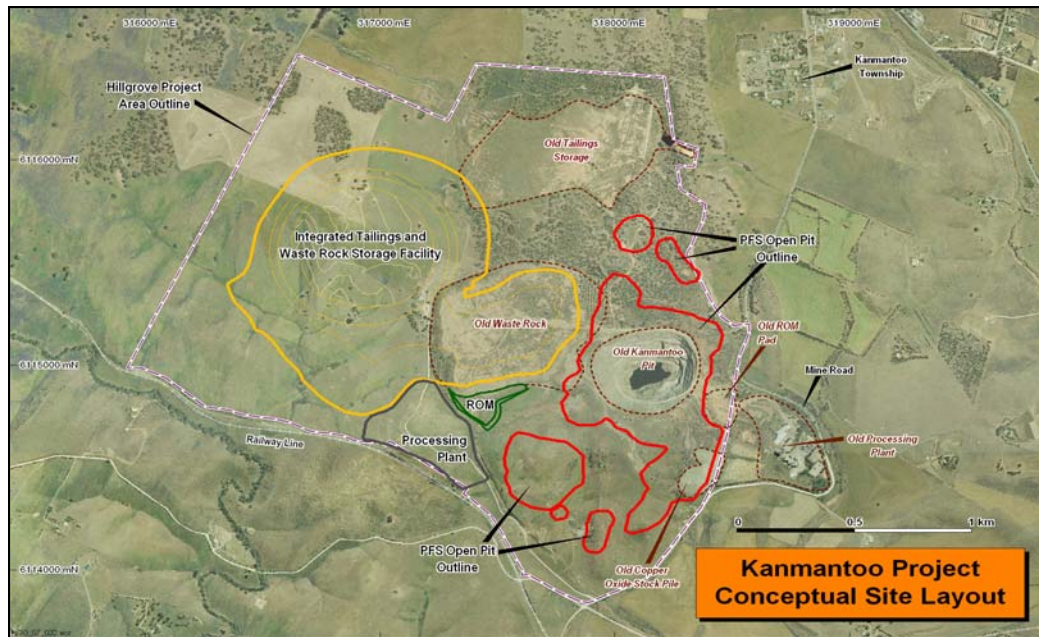


David Archer

Enesar is coordinating the following specialist environmental studies:

- Flora Study
- Fauna Study
- Geochemical Study
- Odour
- Noise study
- Road & Traffic Study
- European Heritage
- Indigenous Heritage
- Hydrogeology.

A possible layout of infrastructure for a re-opened mine at Kanmantoo was also presented, however, I must emphasise again that this layout is only an overview and each of the components will be looked at individually in detail with independent studies and discussed with the CCC over coming months.



The possible infrastructure was sited taking the following items into consideration:

- Native vegetation
- Noise
- Odour
- Traffic
- European Heritage
- Indigenous Heritage
- Hydrogeology
- Tailings Facility
- Final Land Form
- Economic Viability

*David Archer, Managing Director, Hillgrove Resources*

## Development Could Go Underground

Hillgrove's ongoing resource definition drill program at Kanmantoo has intersected further high grade copper-gold mineralisation.

In a statement to the Australian Stock Exchange on March 28, Hillgrove said the latest drilling results highlight significant new mineralisation not yet incorporated within the latest resource or the Pre-Feasibility Study (PFS) economic model, with some high grade intercepts highlighting the potential for an underground development.

Prior to the most recent announcement Hillgrove had announced a JORC-compliant resource of 262,000 tonnes of contained copper and 177,200 ounces of gold.

## CCC Environment Presentation

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The technical presentation at the March meeting was made by Ben Taylor of Ecological Associates Pty Ltd, the firm that is carrying out the Baseline Survey and Impact Assessment for the Kanmantoo project.

Ben explained the legislative framework for the study and the scope of work, which takes in:

- A map of remnant vegetation communities
- Compiling a flora species list for each vegetation community
- Identifying species and vegetation of conservation significance
- Identifying the extent and nature of potential vegetation impacts and
- Identifying opportunities to minimise and offset vegetation impacts.

There was great interest in the survey methodology, which included identifying patches of native vegetation from aerial photography and on-ground reconnaissance. In these patches the vegetation community is identified, a species list compiled, the vegetation condition assessed using PIRSA methodologies, and patch boundaries identified. Seventy five scattered trees and roadside vegetation were also assessed.

Eight vegetation communities were identified among the key findings including 54 hectares of *Eucalyptus odorata* woodland, 23 hectares of *Lomandra effuse* grassland, 17 hectares of *Austrostipa sp.* grassland and 0.2 hectares of *Callitris gracilis* woodland. The total vegetation in the study was 113 hectares and the condition varied considerably. 63 native and 23 introduced plant species were recorded, compared with 91 native and 12 introduced in a previous survey.

The report recommends impact minimisation and mitigation options including protecting remnant vegetation by: designing infrastructure to prevent erosion, minimising dust creation, and controlling weeds. With unavoidable clearance offset by rehabilitating vegetation on site and/or elsewhere, and strategic revegetation.



Samples of local vegetation



## Hillgrove Goes to the Show

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Hillgrove had a very popular stand at the Mount Barker Show this year, displaying photos of the Kanmantoo site and its geology, a selection of core, handing out information packs and fielding questions and comments about the proposal. The vast majority of people were extremely supportive, with 'how do I get a job?' the most common question. The Landholder Liaison Officer, John Popow, hopes to make the stand an annual event at the show.



John Popow and visitor at the Mt Barker Show

## Current Work Programme

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Work during March has again focused on the Definitive Feasibility Study (DFS). This work has seen the completion of the DFS drilling program with the main focus of the drilling activities now on sterilising (showing there is no mineralisation) the potential locations of the proposed mine infrastructure. The bank of consultants lead by Lycopodium Engineering is progressing with the DFS which is still on schedule to be completed July-September 2007.



## KANMANTOO-CALLINGTON COMMUNITY CONSULTATIVE COMMITTEE (CCC)

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This is the first edition of a regular Bulletin from the Kanmantoo-Callington Community Consultative Committee (CCC) which will report on the CCC's activities and ensure that all its deliberations are transparent.

In establishing the CCC, there are certain guiding principles I believe must be followed. The way CCC works must be straightforward, clear and transparent, local in focus, built on the successful experience of the Community Forum and consistent with its Terms of Reference.

To achieve this we will continue to improve on existing initiatives such as use of the Hillgrove website; distribution of this Newsletter; ensuring notices of meetings and other notices are published in the Courier, by direct mail, on notice boards and on the website; and that draft notes to meetings are prepared and circulated.

I am pleased that Dale Ferguson (Hillgrove), Bill Filmer (local landowner), Harry Seager (environment), and Cr Lyn Stokes (District Council of Mt Barker) have already formally accepted invitations to continue in their respective roles as Portfolio Representatives to the CCC. I expect to be in a position to announce additions to this list at the next meeting.

There are three mandated positions set out under the CCC's Terms of Reference: for the local State MP, Mark Goldsworthy or his nominee; for the local Federal MP, Hon. Alexander Downer (who I will be meeting with in April) or his nominee; and for the Executive Director of Minerals and Energy in PIRSA, Dr Paul Heithersay, who has indicated his nominees will be Dr Ted Tyne and Sam Walker – both of whom are familiar faces at our meetings.

I look forward to your continued support and I hope to see you at the next CCC meeting on April 19<sup>th</sup>.

*Bob Goreing, Chairman, Kanmantoo-Callington  
Community Consultative Committee*

## **Notes to the CCC Meeting, Thursday 22 March 2007, Callington Hall**

### **1. Attendance and apologies**

- 1.1. Apologies were recorded from
- Paul Heithersay (Ted Tyne in attendance);
  - Mark Goldsworthy MP and
  - Katherine Roberts

A gallery of about 25 people was in attendance.

### **2. Welcome and introduction**

The Chair said that this was the first meeting of the new Kanmantoo Callington CCC. All in attendance introduced themselves by name.

The Chair outlined the establishment steps for the CCC that were undertaken between the last meeting of the Community Forum on 22 February 2007 and this meeting. These included continuing to develop valuable existing initiatives in areas such as communications and developing new initiatives like standard documents.

The Chair summarised progress that had been made on identifying Community Portfolio Representatives for the CCC. He said that representatives belonged to three groups;

- existing Portfolio Representatives (from Community Forum);
- mandated Portfolio Representatives; and
- new Portfolio Representatives.

The Chair said that the community representatives in the existing portfolios had been approached to determine their interest in the continuing roles (in line with the Terms of Reference for the CCC).

Mandated portfolios included the local elected Members of the State and Federal Governments; Mark Goldsworthy MP and Minister Downer respectively.

The Chair said that New Portfolios had been identified and nominations would be sought from the Callington Oval Committee / All Sports Group (*Broader Community – Callington*), Mt Barker Hospital Board (*Health and Community Services*) and Callington Primary School – School Council (*Schools and other education services*).

### 3. Notes of Previous meeting

The Draft notes of the previous meeting of 22 February 2007 had been circulated with the Newsletter and posted on the website. These were confirmed without alteration.

### 4. Action list

The action list for the previous meeting was discussed:

**Provide case studies (with pictures) to show the size and scale of the proposed operation;**

Dale said that an overview of possible infrastructure placement would be provided at this meeting and that this would show indicative scale.

Dale said that a series computer-generated images which would be laid over pictures of the old Kanmantoo Copper Mine site to give a clear sense of size and scale. This should be ready in the coming weeks for a presentation to the CCC.

**Provide explanation as to how one option is chosen over another – e.g. road over rail**

Dale said an explanation of the basis for deciding on one option over another (in response to issues included in DFS) would be a feature of all the presentations to the CCC, beginning today.

**Identify profile for new Portfolio Champions before seeking nominations**

The Chair had covered this item earlier.

**Establish a library of achievements**

Dale said that the Adelaide Hills Regional Development Board had agreed to house a library of the achievements of both the previous Community Forum and the current CCC. This would be set up shortly.

**Investigate how Indigenous issues would be represented and ensure appropriate opportunity to participate in CCC.**

The Chair said it is important to identify the Indigenous groups across the region and the country to which they belong. The Chair said that he had spoken with some local people on this matter.

Dale said Indigenous issues were included as part of the DFS and a study was being prepared. Indigenous people would have the opportunity to relate to relevant issues raised in this study.

### **Technical presentations on relevant topics as Standing Item to CCC**

Presentations commenced at this meeting.

## **5. Project update**

Dale presented a brief update on the project. He said that the Definitive Feasibility Study (DFS) Drilling Program was largely complete. Once all the assays were in for the DFS drilling program, a new resource would be calculated. Dale said the drill rigs had now moved to drilling of the proposed infrastructure sites.

Dale said that consultants were working on the DFS technical studies including:

- Environmental:
  - Flora
  - Fauna
  - Geochemical
  - Odour
  - Noise
  - Road & Traffic
  - European Heritage
  - Indigenous Heritage
  - Hydrogeology.
- Infrastructure:
  - Metallurgical
  - Mining
  - Tailings Storage
  - Water
  - Power
  - Process Plant
  - Concentrate Handling.

Dale said the DFS was currently on schedule and due for completion in July- September 2007.

## **6. Technical reports**

### **6.1 Infrastructure overview**

Dale provided an overview of a possible infrastructure scenario for mining operation, processing plant and waste storage. It was understood that this preliminary model was meant as a guide only, and to provide a context for technical papers (beginning with flora). They were not settled and would be subject to change in response to the studies undertaken as part of the DFS.

Dale said that the overview represented a maximum possible footprint. Some discussion took place around the possibility for waste rock to be used to contain processing tailings in an integrated facility to the west of the existing mine, that would enable more effective rehabilitation after mine closure.

### **6.2 Flora**

Ben Taylor, an Ecologist with Ecological Associates, gave a presentation on the flora baseline survey and impact assessment that was being conducted as part of the DFS.

Ben's presentation covered aspects such as the Legislative Framework, with a comparison of the (SA) Native Vegetation Act 1991, (Comm) Environment Protection and Biodiversity Conservation Act 1999 and (SA) National Parks and Wildlife Act 1972.

Ben identified his scope of work that included:

- Mapping remnant vegetation communities
- Compiling a flora species list for each vegetation community
- Identifying species and vegetation communities of conservation significance
- Identifying the extent and nature of potential vegetation impacts; and

- Identifying opportunities to minimise and offset vegetation impacts.

Ben identified a range of previous studies on the region conducted between 2004 and present. Ben explained that some plant species and communities had regional and state significance and two had been nominated for national significance but were not yet listed.

Ben presented his key findings that included the identification of eight vegetation communities of varied condition. He listed the significant vegetation that had been mapped and the areas that particular communities covered. Ben said that the total native vegetation in the study area as 113 hectares and that 63 native and 23 introduced plants species were recorded.

Ben described four regionally significant species that were recorded. He said that 75 scattered trees were recorded and assessed.

Ben described the following survey limitations:

- the timing (February - March 2007) which meant that:
  - annual and ephemeral herbaceous species may not be present
  - there was an absence of flowers and fruits on some specimens; and
  - the vegetation condition was difficult to interpret in some circumstances.

Discussion involving the gallery stressed the need for longitudinal surveys. It was suggested that the study area should be resurveyed in the spring. Some discussion took place related to the relevance of including the road between Callington and the existing mine site in the survey area. Using the infrastructure overview as a context, Ben said that there would be a need for direct clearance of some areas of each of the communities as well as 45 scattered trees.

Various options for minimising impacts were discussed including:

- Protecting remnant vegetation by:
  - designing infrastructure to prevent erosion
  - minimising dust creation
  - controlling weeds
- Offsetting unavoidable clearance by:
  - rehabilitating vegetation on site and/or elsewhere
  - strategic revegetation

Copies of a Community Brief entitled *Flora Baseline Survey and Impact Assessment* were circulated that provided a summary of issues, examples of good practice and recommendations and conclusions. Additional recommendations included:

- reviewing revegetation options and management strategies in light of the flora survey findings
- minimising impacts to features of conservation significance
- monitoring impacts with ongoing flora surveys and
- developing an offset plan to compensate for unavoidable impacts.

The status of the two nominations for national significance of plant species and communities was queried. It was suggested that the Commonwealth be approached to clarify this point.

As the Environment Portfolio Champion, Harry was asked to consider a response to the flora issues raised in the presentation at the next meeting of the CCC by using the Community Brief as a guide. The Community Brief was described as a very useful tool that not only provided a summary of issues for the community, but enabled a response to be generated consistent with Terms of Reference of the CCC.

## **7. Open Forum / question time**

Fiona Challen read out an extensive list of comments/questions from teachers at the Callington school which, amongst other things, criticised the consultation process for the project. It was decided to table these comments/questions for a response at the next meeting.

## **8. Correspondence**

The Chairman said that he had received no written correspondence at this time (given it was the first meeting of the CCC).

## **9. Next agenda**

The technical issues for the next meeting were not identified. Dale agreed to do his best to put together a schedule of issues to be covered in the upcoming meetings of the CCC. The Chair asked that groups of issues relating to the same topic be covered in order, where practical. Dale agreed to this.

It was also agreed that, as far as possible, Community Briefs would be prepared for each technical issue and available at least a week before the relevant meeting on the website as well as at the meeting.

## **10. Other business**

There was no other business.

## **11. Next meeting and close**

The next meeting was scheduled for 7.30pm – 9.30pm, Thursday 19 April 2007 at Callington Hall.

Encl. Community Brief: *Flora Baseline Survey and Impact Assessment*

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**Topic: Flora Baseline Survey and Impact Assessment**

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**Précis**

Ecological Associates was engaged to conduct a baseline flora survey of the Kanmantoo Copper Project area. The survey reported 113 hectares of native vegetation including vegetation communities and species of conservation significance. Likely impacts of the proposed copper mine upon vegetation are discussed and potential impact minimisation and mitigation options are suggested.

**Introduction / background**

- State and federal legislation control potential development impacts upon native vegetation and flora.
- Comprehensive native vegetation and flora information is required to adequately assess the potential impacts of the proposed mining development.
- Previous studies have reported the presence of vegetation communities and flora species of conservation significance on the property.
- Comprehensive vegetation mapping and flora survey of the property had not previously been undertaken.

**Issue**

- Clearance of some native vegetation will be required for mining activities.

**Examples of good practice**

Standard options for minimising and mitigating development impacts are to:

- Control impacts risks arising from site operations (e.g. dust, weeds, plant diseases, erosion).
- Compensate for unavoidable impacts by preserving equivalent vegetation remnants elsewhere and by enhancing existing remnants through improved management and by revegetation.

**Recommendations and conclusions**

- Review revegetation options and management strategy in light of flora survey findings.
- Minimise impacts to features of conservation significance.
- Resurvey study area in spring.
- Monitor impacts with ongoing flora surveys.
- Develop offset plan to compensate for unavoidable impacts.

**Important note:**

**This Community Brief is designed to provide a background for interested members of the public on an issue of community interest. It is not a technical paper or detailed study and, in some cases, represents only a summary of progress in an on-going investigation. This brief should not be relied upon for any other purpose other than that for which it was intended.**