

## NOTES OF MEETING HELD AT PORT MORESBY, 24-25 FEBRUARY 2003

### Attendees:

#### Komiti Members

- Sir Alkan Tololo - Chairman
- Dr Graeme Batley - CSIRO (PJV/Placer Technical Advisor)
- Dr. Philip Gibbs - NGO (Melanesian Institute for Pastoral & Socio Economic Service)
- Kay Kalim - PNG Government (Department of Environment & Conservation). Attended Feb 25.
- Elizabeth Karava - NGO (National Spiritual Assembly of Baha'i of PNG)
- Michael Kiap - PNG University of Technology (Government Technical Adviser)
- Patricia Pepena - PNG Government (Department of Mining)
- Pete Neilans - Porgera Joint Venture
- Dr. Bob Pidgeon - Independent Expert (Environmental Research Institute of the Supervising Scientist - Australia)
- Mel Togolo - Placer Dome Asia Pacific

### Apologies:

- Kay Kalim - PNG Government (Department of Environment & Conservation) part only for February 24.
- Dr Peter Siba - NGO (PNG Institute of Medical Research)

### Regular Observers:

- Tim Omundsen - Manager Environment, PJV

### Invited Guests:

- Kai Lavu - PJV, Community Affairs
- Tim Omundsen - PJV, Sustainable Development
- Mark van Dusen - PJV, Sustainable Development

### Agenda Item 1

#### Introductions & Apologies

Introductions made and apologies received. The Chairman took the opportunity to welcome all members. The Chair also noted that Dr. Peter Siba of PNGIMR accepted the invitation to join PEAK and noted his apologies.

## ***Agenda Item 2***

### Notes of Previous Meeting

Notes of the previous meeting were noted and accepted.

## **Agenda Item 3**

### Action Items / Matters Arising

Action items were dealt with and out of the meeting new action items were included as follows:

#### **Action Item 1**

The meeting decided that a follow up of Dr. Taufa's Report be made to Department of Health and to find out if any action has been undertaken to implement some of the recommendations. **(Mel Togolo to action)**

#### **Action Item 2**

The meeting also requested that a Government representative write to the Department of Health seeking clarification on action taken by them on Dr. Taufa's Report. This would give added pressure for the Department to take action. **(Patricia Pepena to action)**

#### **Action Item 3**

After the presentation on Environmental Update, it was decided that at the next meeting, a presentation on relevant aspects of the study on Human Risk Assessment should be made to the Komiti. **(Tim Omundsen to action)**

#### **Action Item 4**

After the presentation and some discussion of the Mine Closure consultation Document, it was agreed that members feel free to make written comments on the document and that these be directed to the PJV. **(All members to action)**

## **Agenda Item 4**

### **Agenda Item 4.1**

#### Update on Environmental Status

Tim Omundsen made the presentation. Copies of information paper were distributed. Compliance at SG3 was met. Safety performance continues to be

maintained at high level. To date a total of 91.7mt of waste have been deposited in Anawe erodible dump and 160.4mt in Anjolek erodible dump.

With respect to environmental spills, the trend has been reducing. From a total of 46 incidents in all categories in 2001, the drop was 27 in 2002.

Report by Dr. Tukutau Taufa has been distributed to relevant people and organisation.

The department had an internal DNV environmental audit and was awarded Level 4, an improvement from Level 3 previously.

Two applications for renewal of WUPs were made (Alipis Sewage and Hides Power Station) and have been recommended by the Board to the Minister for approval. Currently they are undergoing a 28-day statutory period for appeal.

A Sustainability Development Department has been created that will include Environment Department and sections of Community Affairs Department.

Roll out of the mine closure consultation document has taken place. PEAK has been fully briefed. Notes of the brief are included below.

Human Health Risk Assessment downstream of the mine is almost completed.

Various studies are currently underway: -

- Co-disposal of mine waste
- In-pit tailings disposal
- CSIRO Scoping Study of bioavailability of particulate metals in tailings in the river system.
- Pongema mini hydro scheme.

Rehabilitation of the dump areas continues to be advanced.

Community Affairs: -

- Lake Murray fishing project is progressing well and will be completed in June 2003.
- Lake Kopiago classrooms and dormitories have been submitted to the Government for approval under TCS.
- Wankipe - TCS projects including classrooms, teachers' houses and health workers houses are almost completed for this community.
- Bimin projects have been submitted to Provincial HQ for approval before construction can take place.

Community Affairs is also assisting university and college students from affected communities with their school fees.

## Agenda Item 4.2

### Operational Performance

A study on macroinvertebrates in the Porgera/Lagaip River system is on going with assistance from ERISS in Darwin. A comprehensive Health Risk Assessment is also been undertaken on the communities of the Porgera- Lagaip - Strickland Rivers and Lake Murray.

Pete Neilans, MGM, gave a brief on operational performance.

This included a brief of PJV's safety performance where the trend from January 2002 to January 2003 showed a steady decline in serious and disabling injuries.

In 2002 Porgera mine produced 641,811 ounces of gold. Except for the months of August and September, when the power lines were sabotaged by landowners, actual production in 2002 was generally within plan. It should be noted however, that actual production for the month of November and December exceeded plan and partially compensated for lost production in August and September.

The performance of the mill throughput reflects the production profile.

Annual cash costs are predicted to increase.

As forecasted by mine plan, since 1993 gold grades and production in Porgera have been declining. Mining reserves are also declining as predicted.

### Surface Mine

- Significant land areas including, Kogai, Anjolek and Anawe North dumps will be planted with local trees and plants.
- Illegal miners continue to fossick around for gold in waste dumps and pit areas.

### Underground Mine

- Work has started on Eastern Deeps and the Central zone
- Significant increases to underground resources have been realised.

### Mill

- Secondary crusher project has started and will complete in May
- Neutralisation circuit blower is currently underway.

### Community Affairs

- Management of Paiam Township is marginal and many community services are under risk.
- Community support for township is strong but government capacity continues to be weak.
- Mine Closure awareness has started and there appears to be a mixed level of interest
- Restoration of services in SHP is slow and while law and order situation is strengthening, elections in April could jeopardise service delivery.

### Employee Relations

- Employee relations have been good and stable but turnover continues to be high (16% in 2002 and 17% in 2003).
- A new six-year award agreement has been concluded and will be registered in March.

### Exploration Program

- 39,100 meters of diamond drilling is planned.
- Eastern Deeps has advanced to measured resource
- Roamane Deeps resource has been upgraded to indicated resource.
- Review of cut-off grade for the underground mine is underway (6g/t is considered most likely).
- Review of mining cost structure is ongoing.
- Total probable, measured, indicated and inferred resources carried out at difference periods were outlined for the Komiti.

### Regional Exploration Philosophy

- Conduct a five-year program to identify and drill potential targets on existing and if possible on newly acquired ground within the proximity of the mine site.
- PJV staff to coordinate, manage and direct specialists to carry out exploration and associated activities.
- Identify targets in years 1 and 2 and drill in years 3 and 4.
- Submit work programs and budgets for renewal of EL 454 & 858 to Department of Mining.

### Agenda Item 4.3

Briefings as required.

### *Agenda Item 4.3.1*

#### A Pilot Study of Benthic Macroinvertebrates in Streams Around Porgera Mine.

Bob Pidgeon, independent expert, of Environmental Research Institute of the Supervising Scientist (ERISS), explained the purpose of the study. The objective of the study was to;

- Determine whether significant communities of macroinvertebrates live in mountain tributaries of the Strickland River.
- Determine the potential significance of any macroinvertebrates to the ecology of mountain streams.
- Evaluate the possible utility of macroinvertebrates for monitoring the impact of the Porgera mine.

It must be noted that the investigation by CSIRO recommended that a study of aquatic creatures relating to human food chain be carried out to obtain more information about their role in the human food chain. It was noted that macroinvertebrates are widely used as indicators of ecosystem health in aquatic ecosystems.

Location of all sites were identified and samples were collected from mine site streams and control sites. Queensland and Australian sampling protocols were followed and up to four different habitats at each site were sampled. Samples were sent to ERISS for identification and data analysis.

A diverse array of invertebrate taxa, typical of rocky streams, were identified. In all 45 families or orders were collected.

#### Conclusions

- Diverse and abundant invertebrate communities exist in some habitats of the Upper Strickland River.
- Differences among sites appear to reflect possible effects of mine wastes but in some cases there were also natural habitat differences.
- Diversity of taxa provides good potential for monitoring any recovery in biodiversity in tributaries after cessation of mining.
- Preliminary indication is that recovery of inverts may be limited to streams upstream of the Lagaip-Porgera junction.

#### Future?

- Monitoring of macroinvertebrates communities provides a good convenient method of evaluating impacts on biodiversity.

- Future monitoring of inverters would need refinement of sampling procedures.
- There exist a number of agencies that can do identifications, making that task less of a problem.

## Agenda Item 5

### Community Consultation

#### Roll out of Mine Closure Consultation Document

The brief on this document was given by Tim Omundsen and Mark vanDusen both of PJV.

The document was described as a consultation document and as such it provides relevant information on the major closure issues to all stakeholders so they can fully participate in the consultation process.

The first presentation was to PEAK because of its position as an advisory and a verification group. Subsequent presentations to other stakeholders will take place.

It was stated that on present plans, open pit and underground mining will cease at the end of 2006. Milling of stockpiles will continue until the 2012. Reductions in the workforce will commence by natural attrition at the end of 2003 with a workforce of approximately 1000 required for the treatment of stockpiled ore from 2007 until closure.

In brief, the document has been developed with the concept of sustainability rather than simply mine closure. A fundamental principle in the PJV's approach to sustainability is to facilitate the formation of partnerships amongst stakeholders. PJV also recognises that there is a need for capacity building within affected communities to ensure they are empowered and capable of meeting the challenges of sustainable development.

There are three parts to the document. The first chapter is an introduction, which provides the background and outlines the closure planning processes. Chapter 2 discusses the biophysical considerations. It identifies closure issues and outlines the biophysical components. Chapter 3 deals with the socio-economic considerations and examines the key socio-economic issues that confront the communities to be impacted at mine closure. In Chapters 2 and 3, each component outlines the pre-mine conditions, the present situation and the scenario at closure, summarises known stakeholder aspirations, and then identifies some options for closure.

It is anticipated that consultation with all stakeholders will take considerable time due to the large number of stakeholders and the remote areas in which some reside. At the end of the consultation process it is proposed that a mine closure document will be produced which will not be a PJV plan but rather one which considers all stakeholders desires and aspirations.

After discussions and questions for clarification, it was agreed that the Komiti submit comments verbally or in writing to PJV.

The Komiti also commended the PJV for its efforts for coming with the draft document, which contains substantial information.

### *Agenda Item 6*

#### Recommendations

There were no recommendations except those listed under Action Items above.

### *Agenda Item 7*

#### PEAK Reporting

#### **Agenda Item 7.1**

#### Annual Report

The Komiti discussed the draft Annual Report and approved it. This will form part of the appendices to the Porgera Sustainability Report for 2002.

### *Agenda Item 8*

#### Administrative Issues

No administrative issues were raised.

### **Agenda Item 9**

#### Any Other Business

There was no other business.

## Agenda Item 10

### Future Meetings

Next meeting will on October 13-14, 2003.