

## PEAK 2003 ANNUAL REPORT

### Introduction

The Porgera Environmental Advisory Komiti (PEAK) is an advisory group made up of Government, NGOs and independent individuals. PEAK was created in response to community concerns over the impact of mining in Porgera. At the time it was established in 1997, it was the only one of its kind in Papua New Guinea.

Its primary function is to enhance the understanding of Porgera's physical and social environmental issues with stakeholders, review the annual environmental reports and review and advise on mine closure issues. In the long-term this will improve PJV's environmental performance.

PEAK has been operating successfully now for six years and the Porgera Joint Venture (PJV) has benefited from its advice.

Membership of the Komiti is drawn from various organisations, including the government of Papua New Guinea, scientific and social research organisations, Papua New Guinea NGOs and professional individuals. Members have excellent qualifications relevant to achieving the primary objectives of PEAK.

Sadly the Chairman, Sir Alkan Tololo, passed away in August 2003. The late Sir Alkan provided strong leadership and with great wisdom was able to direct the Komiti in giving good advice to the PJV. His contributions are gratefully recognised.

### Summary of Achievements

In 2003, several significant achievements were made. The roll out of the Mine Closure Consultation Document was completed. The first presentation of the document was made to PEAK members in February 2003. A Porgera Mine Closure Committee, with two sub-committees on - Biophysical and Socio-Economic issues - has been established and will oversee mine closure activities. An internal Placer DNV environmental audit was carried out and Porgera was awarded level 4, an improvement from level 3. A Human Health Risk Assessment down stream of the mine was completed and the final report is due in 2004. A needs analysis, specifically on the status of literacy and health, of several villages in the Strickland River region was carried by staff of Foundation for People and Community Development (FPCD). HIV/AIDS and STI intervention programmes have been established and continue to be monitored through a three-year collaborative study established in 2002.

## Meetings

In 2003, PEAK met twice in Port Moresby, once in February and once in October. A majority of members attended the meetings.

## Reports

During 2003, several reports were submitted for review by PEAK and as information for the Komiti. A selection of some of the reports is included in this Annual Report:

### A Pilot Study of Benthic Macroinvertebrates

A preliminary presentation was made to PEAK by Dr. Bob Pidgeon, who carried out the study. This study was part of the recommendation by CSIRO relating to aquatic organisms. The objectives of the study were: - (a) to see if significant communities of macroinvertebrates live in mountain tributaries of the Strickland River, (b) to find out if they were potentially important to the ecology of mountain streams, and (c) to evaluate whether they may be useful for monitoring the impact of the Porgera mine.

The preliminary conclusions were that there exists a diverse and abundant community of macroinvertebrates. Differences among sites appear to reflect possible effects of mine wastes but in some cases no natural habitat differences were noted. The report also noted that the diversity of taxa provides good potential for monitoring any recovery for biodiversity in tributaries after mine closure.

### Roll-out of the Mine Closure Consultation Document

The first presentation of the Mine Closure Consultation Document was made to PEAK in February 2003. This document was also formally presented to the Government, landowners and other stakeholders. Copies of the document were also distributed to interested groups and individuals. The document provides relevant information on major closure issues to all stakeholders. There are three parts to the document: - an introduction, a section discussing biophysical issues for closure, and a section addressing socio-economic aspects of mine closure. Approximate time-lines are provided in the document and a strong emphasis is made on the concept of sustainability in the delivery of its development objectives.

### A Report on Health Risk Assessment

Dr. Keith Bentley made a presentation on his assessment of health risks of communities at the mine and downstream from the Porgera mine operations. This was based on introductory materials from his research. The intention was

to develop a comprehensive health risk assessment for the potential impact of mine-derived materials on communities at the mine and downstream of the mine.

The assessment compared baseline environmental conditions for each study group against groups in specific categories based on pre-determined geographical locations of communities. The data were then compared against international standards. The final objective is to develop a most realistic scenario for each identified geographical location so that further work can be made on addressing potential human health risks.

### **Needs Assessment by Foundation for People and Community Development**

The Foundation for People and Community Development (FPCD), a Papua New Guinea NGO group, made preliminary findings from a needs analysis carried out in several villages in the Strickland River region. A presentation on the subject was made to PEAK in October 2003. Essentially it noted that basic health and education services and standard of facilities were poor. The communities have requested assistance. A follow-up study is scheduled for early 2004. After that, a proposal will be made to PJV on a collaborative programme to assist the communities. The group wants to work in one or more of the communities to improve the standard of health and education.

### **Tracking Mine-Derived Sediments**

Michael Kiap, technical advisor to government, made a presentation on work done by one of his students in relation to mine derived sediments. The study used existing field data to identify metal values that may be suitable for tracking mine-derived sediments. The paper concluded that silver and lead may not be suitable for mine signatures and suggested that Cr-Fe and Pb could be used instead as they may provide better mine derived signatures.

The issue of what happens chemically downstream at off-river-water-bodies when depositions are mixed with mine derived sediments was not clarified. It was pointed out during discussions that using metal ratios to track mine-derived sediments may be scientifically sound so long as they are not affected by other inputs from the Porgera-Lagaip-Strickland River system.

### **Membership**

In 2003 three new members were appointed. Ms Kay Kalim of the Department of Environment and Conservation replaced Gunther Joku who is now on study leave. Dr. Peter Siba of Papua New Guinea Institute of Medical Research took over from Dr. Charles Mgone who has taken a new position in Tanzania. Mr. Nigel Agonia was appointed by the Komiti to be the new Chairman of PEAK.

As mentioned earlier, the Komiti wish to recognise the great contributions made and the leadership provided by the late Chairman, Sir Alkan Tololo. As well, the Komiti also wishes to thank both Dr. Charles Mgone and Mr. Gunther Joku for the valuable contributions they made during the time they served on PEAK.

### Major Issues

The major issues remain the impact of Porgera on biophysical and socio-economic issues. This underpins PEAK's primary functions and the rationale of its existence.

### Future

In future the focus will be on key social and economic issues relating to mine closure and sustainable development in the Porgera Valley and its surrounding areas.

**Nigel Agonia**

**Chairman**