

## PEAK ASSOCIATION INC

P.O. Box 408, Konedobu, 125  
PORT MORESBY, PAPUA NEW GUINEA  
Tel (675) 321 1606/320 0700 Fax: 320 0701  
Mobile: (675) 686 2222  
E-mail: [peakpng@datec.net.pg](mailto:peakpng@datec.net.pg)

---

### PORGERA ENVIRONMENTAL ADVISORY KOMITI (PEAK) ANNUAL REPORT 2004

#### INTRODUCTION:

As an advisory group, PEAK performed, in the last seven years, an important function in helping the Porgera Joint Venture (PJV) to understand its physical and social environmental issues and challenges. PEAK oversaw and provided guidance to the implementation of the recommendations of an independent investigation on Porgera's riverine impacts. This study was carried out in 1996 by CSIRO, which engaged relevant experts from all over the world.

PEAK's terms of reference were reviewed in 2004 after the successful implementation of the CSIRO's recommendations as well as the improving understanding of Porgera's environmental issues and the current planning for mine closure.

This review was important, as it was able to broaden the scope of its functions and responsibilities and aligned them with imminent closure of the Porgera gold mine. The major roles include:

- a. Monitoring and review;
- b. Providing advisory services, and
- c. Information brokering and communication.

Under these main areas, PEAK will be able to provide independent review of the sustainability process, monitor implementation, ensure compliance, provide advice, where appropriate commission studies, compile a knowledge bank and act as a conduit for communication with relevant stakeholders.

Membership has also been broadened to include relevant expertise to reflect the challenges of mine closure particularly in regards to socio-economic issues but without necessarily compromising the biophysical issues, which remain an important aspect of the closure process.

#### SUMMARY OF ACHIEVEMENTS:

Obviously the review of the terms of reference for PEAK is a milestone and contributed to the broadening of the scope of operations. It will also have its own secretariat to make it more independent from PJV and Placer Dome Niugini Limited, Additional and relevant expertise is included among the membership of the Komiti. PEAK has supported and witnessed new partnerships developed between Canada Hunger Foundation and PJV and would like to encourage others to do the same in the interest of sustainable development in the Porgera Valley.

PEAK was able to receive as well as being presented with many important reports and gave good advice to PJV during the year. Some of this is summarised in this Report.

#### MEETINGS:

The Komiti had two additional meetings during 2004. One meeting was held in March and the other in October. In addition, a special meeting of a small group of Komiti members and interested parties was held to review the PEAK terms of reference. A report from this meeting was submitted to the Komiti in October 2004.

#### REPORTS:

During the year, PEAK was presented with many reports and was able to give meaningful advice based upon recommendations received. The following were the summarised version of some of the reports.

##### *Partnerships in Rural Development:*

The Komiti received a submission from Partners in Rural Development also known as Canada Hunger Foundation (CHF), which submission suggested that, as part of the Porgera mine closure process, it saw great opportunities to engage in the economic sector which it saw as the engine of development and capacity building. The programs would include agricultural production, processing and marketing, small and medium size enterprises and micro-finance. The Komiti supported the proposal and recommended that PJV and CHF work together to advance the program.

##### *Foundation for People and Community Development (FPCD):*

The Komiti was presented with a Field Trip Report of the villages in the Oksapmin subdistrict from staff of FPCD regarding the state of the health and education conditions and facilities. This was continuation of some of the assessments made in 2004. From the evaluation, the conditions and facilities of both sectors were very poor indeed. There had not been government presence since 1975 and people would welcome good services provided by any group. FPCDZ developed relevant programs to deal with basic aspects of health and education but needed resources and money to be able to get these off the ground. The program would cover five or six villages.

The Komiti supported the recommendation of the report and advised that FPCD and PJV work out an arrangement to progress the report.

##### *Changing Enga and Ipili Values:*

A member of the Komiti, Fr. Philip Gibbs, who has studied Ipili customs made a fascinating presentation on the beliefs and values of traditional Ipili. The Ipili values of strength, sharing, prudence, respect, patience and land embed in many of the sayings (proverbs) and are couched in terms of the importance of social relations. It was pointed out that the sayings gave insights to values unique to the Ipili but are also shared with the greater Enga communities.

It was pointed out that Porgerans are a cognatic society unlike the rest of Enga. This means that land ownership can be from both the male and female ancestry. In Porgera, women are also landowners. The report pointed out that these values have strong implications for the Porgera Mine. Values like power, sharing, prudence, property succession and gender relations are found today to exist in a contemporary changing society. Their vulnerability has significant implications for the social security of the mine.

#### **STRICKLAND FLOOD PLAIN DEPOSITION:**

Professor Bill Dietrich of Berkeley University, California, made a detailed presentation on sediment deposition on the Strickland flood plain. Field sampling was carried out in June 2003 and involved the collection of sediment cores. The cores were cut into 1 cm sections and analysed for trace metals at the laboratory. Information on the metals in the section of cores can be used to determine the rate of deposition of sediments; the study was an attempt to determine the behaviour of sediment loads on the Strickland River flood plain. In explaining the 'source to sink' concept, he pointed out that climate and tectonics does influence the sedimentation process. Total natural sediment laid on the Strickland was 80 M tonnes per annum while mine derived sediment was 7.8 M tonnes per annum or about 10% of the total load.

Using silver and lead tracer elements, it was estimated to 12% to 13% at SG4 on the Lower Strickland River. In other words, mine derived sediment load decreases with the distance from the source due to mixing and dilution with natural sediments.

Evidence of surface enrichment of silver was consistent with recent over-bank deposition. The highest silver concentrations are comparable to particular silver concentrations in riverine suspended sediments. The study concluded that mine-derived sediments are deposited on the floodplain and that they can appear in some areas up to 1000 meters from the river. It was recommended that further studies should be carried out to monitor the movement and behaviour of mine-derived sediments.

#### **Membership:**

During the year, the following members resigned: Mr. Brad Gordon (PJV); Dr. Graeme Batley (Technical Advisor to PJV); Dr. Bon Pidgeon (Technical Advisor to NGOs); Lady Hilan Los of Individual and Community Advocacy Forum (ICRAF), a Papua New Guinea NGO, and Ms. Elizabeth Karava of the National Spiritual Assembly of Baha'I of Papua New Guinea.

The following new members have agreed to join: - Dr. Martha Macintyre from the Centre of Study of Health and Society, University of Melbourne; Ms. Beris Gwynne, Executive Director, Foundation for Development Enterprise; Dr. Benedict Imbun, School of Business and Management, University of Western Sydney and he is originally from Wabag in the Enga Province; Professor Barry Hart, Director of Water Studies Centre and Professor of Environmental Chemistry at the Monash University, and Ms. Sherrol Marsipal of Economic Sector Division of the Department of National Planning and Rural Development.

The expertise from the new membership will be of significant value to PJV's environmental and social performance and is immensely complementary to the revised terms of reference.

**Major Issues:**

One of the major issues remains the mine closure planning. The Porgera Mine Closure Committee (PMCC) continues to oversee this process and the sustainable development challenges of end of mine life. Management of environmental issues both socio-economic and biophysical remain critical challenges to the operation of the Porgera mine as the operation matures. Another challenge remains the management of wastes and the potential impact on communities close to the mine.

**Future:**

In its revised form, PEAK will focus on the challenges of mine closure and emphasise the critical importance of sustainable development initiatives. It will ensure that social and economic issues are thoroughly addressed by PJV but without compromising the importance of the physical environment.