

## **Tanzania leads the way towards ensuring environmentally responsible mining**

### **By Krissie Clark and Wayne Lotter**

In a developing country such as Tanzania, the positive economic and social spinoffs of mining operations are often seen by the majority to outweigh the impacts these operations have on the biodiversity and ecology of an area. Traditionally mining in conservation areas was seen as a no-go option!!! But, due to the continuing demand for minerals, the depletion of resources in readily accessible areas and changing technologies and economics in the mining sector, mining is increasingly being proposed in remote areas and in conservation areas that were previously unexplored and undeveloped for minerals. This has also been facilitated by the implementation of the mining sector fiscal and regulatory reforms to encourage foreign investment in many developing countries. Thus the reality is, mining is likely to take place in some conservation areas, and Tanzania's Ministry of Natural Resources needs to be prepared as to how to handle the situation (note: this by no means implies that mining should be allowed in all conservation areas and that the no-go option should not be applied in many instances).

Similarly, the mining industry's biodiversity conservation impact management and performance is under increasing scrutiny from NGOs, commentators, shareholders and financial analysts. This is due in part to a growing awareness of the importance of biodiversity conservation, but also because of the fact that the mining industry is moving into more remote and environmentally sensitive areas. Thus demonstrating a commitment to biodiversity conservation is now an essential element of sustainable development for the mining industry.

In Tanzania, as with almost all other countries, current measures are insufficient in addressing conservation concerns associated with mining. Legislation, environmental policies and codes of practice are in place, but there is very little enforcement and monitoring, and many officials lack the specialist expertise in risk management and environmental best practices for mining. In most cases there are no external checks by government officials, making the current situation far too reliant on the integrity of the various mining companies.

Despite the significant potential for negative impacts on biodiversity from mining operations, there is a great deal that companies can do to minimize or prevent such impacts in areas identified as being appropriate for mining. Formal Environmental Management Systems have been adapted across much of the mining industry world wide, predominantly using the ISO14001 series. Many companies require that their operations are either certified to ISO14001 or maintain systems that are compliant with ISO14001. However, ISO was developed for industries, thus ISO and its auditors have a very 'brown' environmental focus, and concern themselves with issues relating to energy consumption, waste management, oil and chemical spills. ISO pays insufficient attention to biodiversity and conservation issues and thus is not ideal for prospecting and mining in conservation areas. The Good Practice Guidance for Mining and Biodiversity manual developed by the International Council on Mining and Metals also supports this contention and makes reference that ISO is insufficient in addressing biodiversity conservation issues.

Fortunately it is not all doom and gloom, the good news is that the Game Rangers Association of Africa (GRAA) in collaboration with WWF Tanzania, has developed a management system, known as PAMS, that is believed to be the ideal tool for ensuring the effective conservation/environmental management of mining operations in areas of conservation importance.

PAMS is designed around international best practice management systems that have proven successful in other business sectors. It is similar to ISO14001 EMS and includes the usual primary components thereof, but contains some different emphases and specific requirements unique to conservation (far greater 'green' focus).

PAMS provides a framework for addressing biodiversity and conservation concerns by:

- Integrating biodiversity/conservation into the mining company's environmental policy;
- Documenting and assessing local biodiversity/conservation issues in consultation with the appropriate stakeholders;
- Undertaking identification and assessment of biodiversity aspects/risks;
- Maintaining a register of legal and other requirements;
- Planning and developing preventative and mitigative measures for significant biodiversity/conservation aspects;
- Implementing preventative and mitigative responses to identified biodiversity/conservation aspects;
- Monitoring, measuring and reporting performance on biodiversity/conservation management;
- Managing the review of procedures and outcomes; and
- Adopting a continuous improvement approach.

Unlike ISO, PAMS can be tailored to suit requirements in Tanzania. Thus not only will the various elements of PAMS give government peace of mind with regard to ensuring responsible mining practices and assist in minimizing the impact on biodiversity and ecosystems, but good conservation management will also bring benefits to mining companies. For example:

- Increased investor confidence and loyalty;
- Shorter and less contentious permitting cycles, as a result of better relationships with regulatory agencies;
- Improved community relationships;
- Strong supportive partnership with NGOs;
- Improved employee motivation; and
- Reduced risks and liabilities.

The GRAA in association with WWF have had several rounds of negotiations with relevant Tanzanian government departments and stakeholders (Vice Presidents Office, Ministry of Energy & Minerals, Wildlife Department, National Environmental Management Council and members of the Chamber of Mines) in order to obtain the necessary input, support and endorsement for PAMS. Thus far it has been received very positively and PAMS is about to be implemented and fine-tuned, in collaboration with the relevant government authorities. This will be done with a leading environmentally responsible mining company whereafter it can be set as a requirement of prospecting and mining permits that are issued in areas of conservation importance. The GRAA and WWF will also set about developing the necessary skills for the roll out of PAMS within the country and train the necessary PAMS auditors. The implementation PAMS into the

Tanzania mining sector is an opportunity for the country to take a lead internationally in terms of setting standards for ensuring an environmentally responsible mining industry.

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