

**Appendix No.1**

**Environmental Commitment Plan**

## **1.1 Introduction**

The Large scale gemstone mining Licences herein applied for will adhere to the requirements of the Mines and Minerals Act No.7 Of 2008, the Mines and Minerals(Environmental)Regulations of 1997 and other relevant legislation that will include the following:-

- I The Environmental Protection and pollution Control Act, Chapter 204(EPPCA).
- ii The Water pollution Control (Effluent & Waste Water) Regulations, 1993.
- iii The Air Pollution Control (licensing & Emissions Standards)Regulations,1996.
- iv. The hazardous waste Management Regulations (S.I No.125 of 2001.
- Vii. The Mines and Minerals Development Act No. 7 of 2008.
- Viii. Environmental Protection Fund (EPF) Regulations (SI No.102 of 1998).
- ix Forestry Act, chapter 283
- X . Town and Country Planning Act, Chapter 283
- Xi The water Act of 1949.
- Xiii The National Heritage Conservation Act 1989.
- Xiv .The lands Acts of 1995,and the land Acquisition Act of 1995.
- xv. The public Health Act of 1996
- xvi The Explosive Act of 1971.

The gemstone prospecting and mining activities will as much as practically possible be environmental friendly, and with strict monitoring measures. The project will also put in measures the mitigation on any possible negative impact on the environment.

However, very negligible social-economic and environmental negative impact are expected in the targeted area.

During the period, prospecting operations will be labour intensive with minimal mechanization, and therefore negligible impact on the on the environment is expected.

## **1.2 Brief Description of area**

The area is mainly characterized plain to rolling landscape, covered by some stretches of woodlands, with some isolated grasslands and dambos.

A few isolated open cultivate areas are mainly used for substance farming of mainly cassava, maize and finger millet. There are almost no grazing of domestic animals within the project a're. However; a few grazing areas are located near a few nearby Villages. few dambos are used to the nearby Villages for fish ponds.

No existence of large fauna is evident in the area. However, a few varieties of small mammals,birds,insects and reptiles exist in the area with habitation mainly provided by the scattered vegetation,grasslands,anthills,sub-surface and rock outcrops.

The area of interest is purely of rural setup and thinly populated with scattered human settlements and activities. A few social-economic activities are available in the area for the local population. Mostly; the local community is involved in subsistence farming of mainly finger millet, maize and cassava.

### **1.3 Expected social-Economic and Environmental Impacts.**

#### **1.3.1 Social-economic Impact**

Negligible social-economic impact is expected. No resettlement resulting from the proposed prospecting would be necessary.

It is anticipated that direct and indirect employment for local Zambians would be created. The project would therefore contribute positively to the growth of the local economy resulting in improved household income in the local community.

On the other hand, the project will contribute to the increase in population and immigrants in the area, though negligible. With an increase in human population due to bring along socio-economic and cultural changes in the area. The increased population especially due to migration is also likely to contribute t o the change of prevalence pattern of the spread of HIV/AIDS in the area.

#### **1.3.2 Environmental Impact**

##### **1.3.2.1 Expected Impact**

Minimal impact may arise from the prospecting activities in the area. The increased Socio-economic activities may also impact on the environmental negatively though negligible.

The environment may be impacted in the following:-

**i. Land use:-**

- The area of interest mainly sparsely populated, most of the portion is not occupied and therefore there is no potential for and use in the project area. Minimal environmental impact is therefore expected on the land use potential
- Absolute minimal or no impact is expected on the land use due to expected solid waste generated from human activities at the project area.

**ii. Water/drainage of area**

- No possible water pollutions is expected within the project within the project area as no chemical would be used during prospecting operations. However, absolute minimum possible water pollution may occur at some nearby water outside the project area
- No impact is expected on the surface water quality and quantities in the project area.
- No impact is expected on the Aquifer recharge and water run-off rates.
- No impact is expected on the flow regime of water course,
- Minimal impact is expected on the compatibility of prospecting developments within surrounding areas.

**iii. Ecology**

- Absolute minimal negative impact may be expected on the number and diversity of flora and fauna due to prospecting activities in the area.
- Minimal visual impact is expected on the landscape due to removal of vegetation and some notable features in the area of project.
- Minimum impact is expected on the compatibility of prospecting developments within surrounding areas.

**iv. Climate**

- No impact is expected on climate pattern of the project area.