

Appendix 3

GEMFIELDS ENVIRONMENTAL COMMITMENT PLAN:

Mining operations by their very nature have the potential and tendency to cause environmental degradation and pollution as a consequence of the techniques employed in the operations and by the general nature of the works involved.

Various kinds of pollution such as air, water, noise and soil pollution are very likely to be caused by mining operations.

Gemfields mining operations, like all other mining operations, is also capable of such pollution.

Waste generation is also another aspect to consider as wherever resource inputs are introduced, there should be an output, which also involves a waste stream.

Land and water resources are one other aspect of the environment likely to be affected by mining operations and the protection and reclamation of the same is extremely vital.

All in all, wherever mining operations take place, there are always impacts on the environment and the onus is on the developer to keep the adverse effects on the environment to a minimum. This is done in order to comply with the environmental statutes and regulations.

As Gemfields mining is an environmentally responsible company with the view of minimizing adverse environmental impacts and in its quest to comply with the environmental regulations of the land according to the Environmental Management Act and the Mining Environmental Regulations, we will ensure that this is adhered to and the consequent impacts of our operations on the environment are kept to a minimum.

AIR QUALITY

One of the aspects likely to be affected by operations at Gemfields is that the air quality maybe compromised as a result of blasting and mining activities, however, to prevent this, a water bowser will be used to spray the access routes to prevent dust development. Blasting will not be conducted during windy conditions to minimise the area affected by the dust resulting from the blasting exercise.

Other than compromising the air quality, blasting activities will also generate localized disturbances such as noise and the surrounding vegetation and remoteness of the site will screen the noise. It is therefore important to prevent unnecessary clearance of vegetation. In so doing, air pollution and noise pollution will be kept to a minimum.

WATER QUALITY

Surface water is another aspect that may be affected and polluted by mining operations through water being dewatered from the pits, which may find its way into water streams surrounding the mine. To avoid this kind of pollution and contamination, the dewatering water will be pumped to a dewatering settlement pond to settle out solid particles prior to its discharge to surface water or pumping to the process water dam. Solid particles will be removed from the settlement pond prior to the start of the rainy season. Water monitoring and sampling will be conducted on a regular basis from all water sources, i.e. rivers, dams, settling dams, boreholes, etc.

LAND AND SOIL QUALITY

Local contamination may occur from spills of oil, fuel and hydraulic fluids from mine vehicles, storage facilities and equipment workshops. To prevent this, oil collection trays will be used when breakdown occur or when working on machines with likelihood to cause this contamination.

Degradation of the soils may also occur through erosion on exposed surfaces. Clearance of vegetation around the waste rock dumps will be restricted to 5m. Cleared top soil will be stored for re-vegetation and dump rehabilitation purposes.

TREATMENT OF WASTE

Local contamination may occur from indiscriminate disposal of non-hazardous solid waste e.g. paper, plastic, cans, tins, wood. Reusable materials will be recycled. All such waste will be collected and disposed of offsite as per approved norms. Organic material can be used to create a compost facility to assist with the re-vegetation program.

Local contamination may occur from hazardous medical waste from the clinic. An onsite incineration unit will be developed or hazardous medical waste will be disposed of as per approved norms.

Other hazardous waste such as waste oils, waste batteries, fuel filters will also be generated and they will be handled as per statutory regulations, that is to start with, licenses will be acquired from ZEMA for generation and handling of any such waste and the conditions attached to those licenses will be adhered to and complied with accordingly.