ENVIRONMENTAL ASSESSMENT AND MANAGEMENT PLAN FOR EXCLUSIVE PROSPECTING LICENCE 9973, OMAHEKE REGION

BACKGROUND INFORMATION DOCUMENT



Prepared by: Prepared for:





1 INTRODUCTION

Votorantim Metals Namibia (Pty) Ltd (the Proponent) received an "Intention to Grant" from the Ministry of Mines and Energy in respect of their application for exclusive prospecting licence (EPL 9973) in the Omaheke Region. The EPL will be granted to the Proponent upon successful acquisition of an environmental clearance certificate (ECC) for the EPL area, as indicated in Figure 1. The EPL is for the exploration of base and rare metals, industrial minerals and precious metals and covers an area of 47,283 ha.

The Proponent has requested Geo Pollution Technologies (Pty) Ltd (GPT) to apply for an ECC for the proposed exploration activities related to EPL 9973. The ECC is required as per the Environmental Management Act No. 7 of 2007 (EMA). In support of the ECC application, an environmental scoping impact assessment (EIA) and environmental management plan (EMP) will be submitted to the Ministry of Environment, Forestry and Tourism's Directorate of Environmental Affairs (DEA).

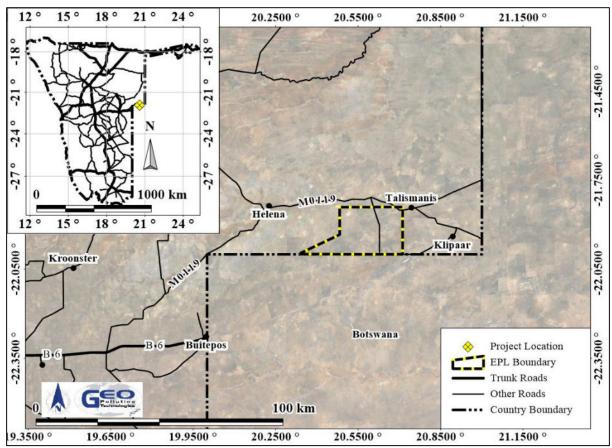


Figure 1 Project location

2 PURPOSE OF THE BID

With this background information document (BID), GPT aims to provide information to, and interact with, interested and affected parties (IAPs) regarding the project and the environmental assessment process. IAPs are therefore invited to register with GPT to:

- Provide information which should be taken into account in the assessment of impacts.
- Share any comments, issues or concerns related to the project.
- Review and comment on the EIA and EMP.

3 PROJECT DESCRIPTION

Activities considered for the environmental assessment have been divided into the following phases: planning, construction, operational and decommissioning phases. A brief outline of expected activities for each phase is detailed below.

3.1 PLANNING PHASE

Planning is ongoing and include planning for the various phases involved with the exploration activities. As part of the planning phase, it is the responsibility of Proponent to ensure they are and remain compliant with all legal requirements. The Proponent must also ensure that all required management measures are in place, prior to and during all phases, to ensure potential impacts and risk are minimised. Typical planning activities include:

- Obtain or renew permits, licences and approvals from all relevant local and national authorities. This includes the ECC and drilling authorisation from the Ministry of Agriculture, Water and Land Reform.
- Planning to meet the various conditions that may be prescribed by the MEFT as issued as part of the ECC.
- Liaison and reaching surface access agreements with all land owners regarding access to their property.
- Make provisions to have a health, safety and environmental coordinator to implement the EMP.
- Ensure provisions for a fund to cater for restoration or rehabilitation in areas where exploration activities occurred, and for the eventuality of environmental incidents or pollution resulting from exploration activities.
- Ensure all appointed contractors and employees enter into an agreement with the Proponent which includes the EMP.
- In accordance with the ECC conditions, maintain a reporting system to report on the various management parameters as outlined in the EMP. This is a standard requirement of ECC conditions.

3.2 CONSTRUCTION PHASE

Construction related activities pertain mainly to the establishment of access roads to specific areas targeted mainly for exploratory drilling, setting up temporary worker camps (if required), clearing and possibly levelling of drilling pads and associated laydown areas, and construction of temporary ablution facilities. The Proponent however prefers to make use of existing accommodation facilities in close vicinity of the EPL and will only have temporary worker camps where no other option is available.

To minimise impacts, existing roads or fire breaks will be used to gain access to the exploration sites or drill locations, where possible. Such access routes will be determined in consultation with the land-owner and an agreed post exploration use of the area will also be confirmed. Alternative routes will be considered to avoid slopes, animal burrows, nests and sensitive vegetation such as large or mature trees. These measures will form part of the surface access agreement. Roads, camps and laydown areas will be created by bulldozer and/or manual labour, depending on the terrain and vegetation type and density.

3.3 OPERATIONAL PHASE

The operational phase encompass all operational activities performed within the EPL for purposes of exploring for the relevant commodities (base and rare metals, industrial minerals and precious metals). These include:

• Desktop studies: Review of existing geological literature and data for the area of interest.

- Remote sensing: Imagery and spectral data obtained from aerial surveys or satellites. Such data will be used to map geological characteristics and structures, with the aim of determining focus areas for more detailed exploration activities.
- Field surveys: Geological mapping of focus areas by visual confirmation of surface geology.
- Soil and geochemical sampling: Rock and soil collection and analysis to determine mineral content and thereby further refining the focus areas for exploration.
- ♦ Geophysical surveys: Surveys used to determine and map subsurface features without drilling. Various geophysical survey methods exist and include seismic, magnetic, electrical, electromagnetic and gravity methods. The Proponent will mainly use electrical (induced polarization and electrical resistivity tomography) and electromagnetic (audio-magneto telluric or electromagnetic sounding surveys) methods. These measure the electrical and electromagnetic properties of the subsurface to identify different materials and subsurface geology to refine focus areas. For both, survey lines need to be cleared to ensure unrestricted access for the equipment and cables. The survey lines are usually about 1 m wide, but may be of varying length. Limited vegetation is cleared for such lines.
- Exploratory drilling: Once sufficient information is gathered from the above methods, and focus areas for exploration have been determined, a drilling plan can be determined and executed. This constitutes the most invasive part of exploration. Drilling typically involves a diamond core drilling rig used to cut and extract cylindrical rock cores from the subsurface. Drilling logs will be kept and drill chips or cores will be collected for analysis in order to determine ore reserves and resource feasibility.

Access to privately owned land will only be gained as per agreed schedule and in conformance with the requirements as determined and agreed upon in the surface access agreement. This will typically include all members of the exploration team wearing clearly identifiable clothing (uniforms) with identification tags. All vehicles will also be clearly branded as belonging to the Proponent. These measures aim to address security concerns related to unauthorised persons gaining access to land, by posing as members of the exploration team.

Should exploration advance to the exploratory drilling stage, the drill rig and its associated equipment such as compressors, drill rods, etc., will be mobilised to site. Water and fuel for drilling operations will be carted to the drill sites. Adequate temporary ablution and mess facilities will be provided to workers who will be present on site for extended periods (e.g. during drilling). All waste, including any polluted soil or water, will be collected for disposal at recognised waste disposal facilities. Where possible, sewage will also be collected and disposed of at a registered wastewater treatment facility. Sewage may also be disposed of in existing or newly constructed pit latrines, septic tanks or french drain systems on the farm, in agreement with the land owner. Daily operations further include administrative tasks, security services and procedures, site maintenance and related activities. Maintenance of access roads will continually be conducted and includes dust management if and when required.

3.4 DECOMMISSIONING PHASE

Decommissioning during the exploration phase entails vacating exploration areas and removal of all equipment and infrastructure used by the Proponent or their contractors. All areas and roads will at such time be rehabilitated, or handed over to the land owner, in accordance with the surface access agreements reached prior to initiation of exploration activities. Rehabilitation may include shaping and/or ripping of roads, campsites, laydown and drilling areas to prevent erosion, allow rapid establishment of vegetation, and reduce the visual impact by contouring such areas to fit in with the natural topography of the land. Any pollution (e.g. fuel. oil, hydraulic fluid) as well as all drilling cores and cuttings present on and around explorations sites must be removed at such time. Drill cuttings can also be used for beneficial purposes (e.g. road surfacing, backfilling erosion ditches, etc.) in agreement with the land owner. Any potential hazardous cuttings should however be identified and removed accordingly.

3.5 Preliminary Identified Impacts

During the preparation of the environmental assessment, all components of the environment will be considered. However, only those components which are, or may be, significantly impacted, or are deemed to be sensitive, will be assessed. These may include, but is not limited to, the following:

- Social (demographic profile, employment, social ills, etc.)
- Security (theft, unauthorised access, etc.)
- Economic (wages, procurement, taxes, etc.)
- Waste (general, sewage, hazardous, etc.)
- Soil and water (groundwater, surface water and soil pollution, erosion, compaction)
- Ecology (habitat loss, poaching, protected species, disturbances)
- Health and safety (injuries, exposure, noise, etc.)
- Visual (erosion, scarring, pollution)
- ♦ Heritage and archaeology (historic artefacts, paleontological finds, etc.)

4 PUBLIC CONSULTATION

GPT invites all IAPs to provide in writing, any issues and suggestions regarding the project. This correspondence must include:

- Name and surname
- Organisation represented or private interest
- Position in the organization
- **♦** Contact details
- Any direct business, financial, personal or other interest which you may have in the approval or refusal of the application.

All contributions become public knowledge and will be circulated along with the reports as per the EMA requirements. The comments, inputs and suggestions will also be submitted to the DEA, along with how any issues have been addressed in the EIA. The public participation process will remain ongoing during the environmental assessment. However, all comments and concerns should timeously be provided to GPT to ensure incorporation into the final report. For any additional information the project team may be contacted at:



Geo Pollution Technologies (Pty) Ltd Telephone: (+264-61) 257411 Fax: (+264) 88626368

e-mail: epl9973@thenamib.com

Your Rights as an IAP according to the Environmental Management Act, No7 of 2007, Government Notice No 30 (Environmental Impact Assessment Regulations)

Section 23.

- (1) A registered interested or affected party is entitled to comment in writing, on all written submissions made to the Environmental Commissioner by the applicant responsible for the application, and to bring to the attention of the Environmental Commissioner any issues which that party, believes may be of significance to the consideration of the application, as long as -
 - (a) comments are submitted within 7 days of notification of an application or receiving access to a scoping report or an assessment report;
 - (b) the interested and affected party discloses any direct business, financial, personal or other interest which that party may have in the approval or refusal of the application.
- (2) Before the applicant submits a report compiled in terms of these regulations to the Environmental Commissioner, the applicant must give registered interested and affected parties access to, and an opportunity to comment in writing on the report.
- (3) Reports referred to in sub regulation (2) include
 - (a) scoping reports;
 - (b) scoping reports amended and resubmitted;
 - (c) assessment reports; and
 - (d) assessment reports amended and resubmitted.
- (4) Any written comments received by the applicant from a registered interested or affected party must accompany the report when the report is submitted to the Environmental Commissioner.
- (5) A registered interested or affected party may comment on any final report that is submitted by a specialist reviewer for the purposes of these regulations where the report contains substantive information which has not previously been made available to a registered interested or affected party.

Section 24:

The applicant responsible for an application must ensure that the comments of interested and affected parties are recorded in reports submitted to the Environmental Commissioner in terms of these regulations, and comments by interested and affected parties on a report which is to be submitted to the Environmental Commissioner may be attached to the report without recording those comments in the report itself.