02 May 2013

The Environmental Commissioner
Ministry of Environment & Tourism
Private Bag 13306
WINDHOEK.

Dear Mr Nghostila,

North River Resources (Pty) Ltd incorporating Namib Lead & Zinc Mining (Pty) Ltd:
EPL 2902

Environmental Impact Assessment for an application for a Mining Licence

Registration of the Project and EIA process with MET

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1 INTRODUCTION

This document is submitted to MET in order to Register the above project and the EIA process for the Namib Lead and Zinc Mine, in the Dorob National Park.

The project involves underground mining, processing using chemical reagents (potentially hazardous) and disposal of tailings on the surface. Due to this sensitive location and the nature of the project activities, a full Environmental Impact Assessment (EIA) and Management Plan (EMP) will be carried out.

Please refer to the attached Public Information Document, which has also been sent to the Directorate of Parks.

If the Environmental Commissioner or the Directorate of Parks has any concerns or queries about the project, please advise us in writing before 20 June 2013 (email is preferred, or fax).

2 PUBLIC INFORMATION DOCUMENT

The attached Public Information Document No.1 (PID1) provides details of the project proponent, location, and proposed project activities that may have impacts on the biophysical or social environments.

The PID includes an invitation to a Public Meeting in Swakopmund on the 21 May 2013.

3 TERMS OF REFERENCE / PROPOSED SCOPE OF WORK

The following tasks will be completed during the EIA process and subsequent Environmental Management Plan (EMP).

1. Project inception and information from the Client: North River resources has provided a report (Lund / LMS, Oct 2012) containing information about the project proposal.

2. GIS Mapping: will be conducted on high resolution aerial images for the purpose of:
   - Mapping of vegetation / habitat types,
   - Providing information to the public and authorities,
   - Use in planning the location of activities on site, and
   - Illustrating the EIA report.

3. Field visit: was conducted in May 2012 by the environmental scientist, and specialists in botany and fauna. This covered the whole EPL at a reconnaissance level and the target areas for mining in detail. The purpose was:
   - Familiarisation with the mining site and EPL area,
   - Input to an overall description of the affected environments,
   - Identify possible environmental issues and impacts,
   - Compile a baseline photographic record of the area.
4. Specialist Botanical Survey & Report (completed) to:
   - Fieldwork to provide botanical baseline study and mapping of vegetation types in the EPL,
   - find particular habitats and locations that are botanically sensitive,
   - determine the conservation status of plants found,
   - assist in identifying previously disturbed habitats,
   - compile a specialist report for the EIA with management guidelines.

5. Specialist study on Fauna: Vertebrates (mammals, reptiles, amphibians & birds) and Invertebrates (completed):
   - Provide a baseline study on these taxa based on fieldwork and desktop study,
   - Identification of potential taxa of concern,
   - Identify habitats in need of protection,
   - prepare specialist report on biodiversity at scoping level

6. Specialist archaeological survey and report (completed)

7. Legal and policy register by specialist legal practitioner (completed)

8. Consultations with Authorities: MET, Parks, MME, MAWF, MTI, MoHSS, Erongo Regional Council, Town Councils of Swakopmund, Arandis & Walvis Bay, and parastatals - Namwater, Namport, Roads Authority, NamPower, and ErongoRED.

   Meetings will be held with MET & Directorate of Parks. The rest will be notified by letter and invited to express any issues or concerns.

9. Public participation programme:
   - Compile a list of known Interested & Affected Parties (I&APs),
   - Public information document – to I&APs and all relevant Authorities,
   - Registration of EIA with MET (this document) – providing an opportunity for MET & Parks to raise any issues or concerns at an early stage,
   - Advertisements in the press, with invitation to public meeting and to register as an I&AP,
   - Two public meetings in Swakopmund,
   - Registration of I&APs,
   - Feed back minutes and summary of issues and concerns raised by all I&APs.

10. Literature Review: will feed into the EIA report.

11. Specialist hydrogeological report: NRR has commissioned SLR to undertake a specialist study to identify potential impacts of the project on groundwater and/or surface water.

12. Other possible specialist studies:
   - The need for a specialist study on air pollution is not yet apparent as there are no neighbours near to the mine site. This needs to be discussed with MET (Environmental Commissioner) and the Directorate of Parks (Windhoek & Erongo / Swakopmund).

13. Socio-economic study: No specialist study by a specialised socio-economist as the socio-economic issues appear to be simple – there being no near neighbours to the site. Its effects on tourism in a Park will need to be considered. The availability of housing in Swakopmund will also need considered.
14. A draft EIA report will be compiled and submitted to the Client for comment. Following the comments stage, the EIA report will be finalised and submitted to MET for an Environmental Clearance certificate.

15. An Environmental Management Plan (EMP) will also be submitted to MET to manage the impacts of Construction, Operations and Closure / Rehabilitation stages.

16. Exclusions: The EIA and EMP does not include the current drilling exploration. It also does not include occupational health and safety.

4 STUDY TEAM

**Colin Christian & Associates CC** was established in June 2006. The associates are specialists whom we work with on a project contract basis.

**Mr. Colin Christian** has a Masters Degree in Environmental Science (with distinction) from the University of Cape Town – a two year masters by coursework and thesis. He also has a BA Hons degree in Geography from the University of Natal.

Colin is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professions (SACNASP) in Pretoria – there being no professional body in Namibia.

He has 24 years of relevant experience in geography and environmental science, including 16 years in environmental consulting. For 11 of those years he has practiced in Namibia.

For 5 years prior to starting on his own, C.Christian was the Manager and Senior Environmental Scientist with Eco.plan (Pty) Ltd in Windhoek – which was a subsidiary of WSP Walmsley in South Africa. Before that he served as Environmental Scientist for 5 years with the engineering firm GIBB Africa/ARCUS GIBB in South Africa.

Over the past 16 years he has specialized in Environmental Impact Assessments and Management Plans, land use planning for development and conservation. His project experience includes mining and exploration, industries, waste management, civil engineering projects (roads, powerlines, water supply projects), housing and other urban developments, a hydro power proposal in Namibia, tourism developments, a biofuel project in Kavango, and bush-to-energy projects. Further project experience is detailed in the CV, attached.

**Mr. Peter Watson** has a BA LLB degree. He has compiled the register of laws and policies with which the project must comply.

**Dr. Antje Burke** has a PhD equivalent in Landscape Ecology, with Botany and Geography (cum laude). She also has an MSc equivalent in Geography, Botany and Geology. She has 24 years experience in environmental management and assessment, closure and sustainability planning, biodiversity issues, conservation and regional planning, natural resource assessments and rehabilitation.

Antje has an excellent knowledge of the flora of the Namib and has numerous publications to her name. Her work over the past 20 years has included over 50 EIAs and EMPs in Namibia – mainly in the mining sector. Her experience with rehabilitation work in relation to mining is second to none in Namibia.

**Dr. John Irish** has a PhD in entomology and an MSc in this field as well. He was head of Entomology at the National Museum of Namibia for many years and then began freelance consulting as a biodiversity professional - he has 5 years experience in this work, the majority of it
being in relation to the mining sector. One of the strengths that he brings to his discipline is an ecosystem approach and not merely a taxonomic approach (identification of invertebrates).

He is also well capable of dealing with vertebrate species as well, and there is also much published information about Namib fauna. He has numerous publications in his field and has conducted specialist components for many EIAs.

Dr. John Kinahan is a pre-eminent archaeologist in Namibia has conducted archaeological surveys for numerous EIAs as well as conducting his own research and publishing books and papers in his field. He is so well known that he scarcely needs an introduction.

Ms. Katharina Dierkes has an MSc equivalent degree in Geography and specialises in GIS mapping

If required, Ms Hanlie Liebenberg-Enslin from Airshed Planning Professionals in Johannesburg will be requested to undertake the air dispersement modelling and air pollution assessment. Airshed is one of the pre-eminent companies in this field in South Africa and they also have considerable experience in Namibia.

The Public Participation Assistant will be Maureen Fidler, who has assisted CCA with several public participation programmes in a secretarial and administrative role.

Environmental Scientist

for

Colin Christian & Associates CC