

PROJECT BACKGROUND INFORMATION DOCUMENT

The Beauna Mining (Pty)
Ltd.'s Application for
Environmental Clearance
Certificate in Respect to the
Proposed Construction and
Operation of Copper
Processing Plant near
Sesfontein, Kunene Region


MARCH 21

Compiled for: Beauna Mining (Pty) Ltd
P. O. Box 1268, Windhoek
Email: andy@beaunamining.com

Authored by: Mr. Lawrence Tjatindi



DOCUMENT INFORMATION AND APPROVAL

Title	Background Information Document for The Beuna Mining (Pty) Ltd.'s Application for Environmental Clearance Certificate in Respect to the Proposed Construction and Operation of a Hydrometallurgy Copper Plant	
ECC Application Reference number	APP-00	
Location	North-east of Sesfontein, Kunene Region	
Proponent	Beuna Mining (Pty) Ltd P. O. Box 1268 Windhoek, Namibia	
Author:	Signature	Date
Mr. Lawrence Tjatindi (EAP) 1		18 March 2024
Mr. Shadrack Tjiramba (EAP) 2		18 March 2024
Approval - Client 2		
Mr. Wang Yun		21 March 2024
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1. INTRODUCTION

Beauna Mining (Pty) Ltd is a mineral mining entity, established in 2021 and registered with the Business and Intellectual Property Authority (BIPA) in Namibia in 2022, with the sole intention to explore, develop and extract copper and related commodities. Our mine is situated in the Otjikondavirongo Opuwo Rural constituency in the Kunene Region, Namibia.

The company has six shareholders, comprising of two Namibians and four Chinese. Our company's primary business is the exploration for and extraction of minerals to meet the global demand and in the same vein, contributing to the local economic development of the land and its people.

As the company is in the construction phase of their mine, the current workforce stands at 28 employees and is expected to double by the time we conduct full scale mining, within the next four to six weeks.

In particular to this Scoping Assessment, Beauna Mining (Pty) Ltd envisage to build a Hydrometallurgy Copper Plant near Sesfontein Settlement (about 6km to the east, **Figure 1**) to aid the process and advance to a point they are able to smelt their own products locally. Hence, the company has identified a land area of ~ 85 (Ha) hectares for which it wishes to obtain a leasehold and therefore the need for, in addition to other legislative requirements they seek to obtain an environmental clearance certificate for the proposed processing plant.

The proposed project site is situated within the communal land area under the jurisdiction of the Nami-Daman Traditional Authority and is accessible thorough the C43 and then the D3707 district (gravel) road connecting Sesfontein via Kamanjab, Palmwag and Warmquelle. The site surface is relatively flat with elevations ranging between 590 and 611 meters above sea level.

The key component of the proposed activity entails land surveying, creation of access track / road, construction of office and Supporting infrastructures (ablution, power and water storage facilities), Workshop, laboratory, staff accommodation camp, processing / leaching ponds, stockpile area and tailings dams (including temporary on-site solid-waste yard).

In line with the environmental assessment process, an environmental scoping and environmental management plan encompassing environmental obligations associated with the proposed operations shall be submitted to the Department of Environmental Affairs in order to apply for Environmental Clearance Certificate (ECC).

The proposed mining and prospecting activity triggers some environmental concerns (see Table 1) during the different phases of the development in terms of the Environmental Management Act no. 7 of 2007 and the Environmental Impact Assessment Regulations of 6 February 2012 that may not be undertaken without an environmental clearance certificate (ECC).

Table 1: Summary of key potential environmental concerns during the preparation (construction of mine infrastructure), operational and, closure and decommissioning of the proposed mine development

Potential Source of concern	Description of Potential Concern	Assessment classification i.e. positive / negative
Surface Ephemeral Watercourse and Groundwater Contamination		
Site preparation and construction activities	Potential release of sediments resulting in high concentration of total suspended solids in watercourse	Localised, Low negatives impacts
Construction of linear infrastructure i.e. access roads, water pipelines and powerlines	Potential for effects on aquatic ecosystem resulting from stream-crossing due to creation of access roads	Localised, Low negatives impacts
Fuel and Chemical storage, handling and haulage	Potential release of hydrocarbons from petroleum product and chemicals in an event of spillage may lead to contamination of waters	Localised, Low negatives impacts
Operation and maintenance of mine equipment on-site e.g. vehicles etc.	Potential release of sediments resulting in high concentration of total suspended solids in receiving water	Localised, Low negatives impacts
Terrestrial Biodiversity and Ecosystem disturbance		
Site preparation and construction activities associated with the proposed mining and exploration	- Clearing of vegetation around the mine site may impact on biodiversity i.e. in the case where rare, threatened or keystones are present at the plant area	Localised, Low negatives impacts
Construction of linear infrastructure i.e. access roads, water pipelines and powerlines	- Activities might dislocate or disrupt local wildlife and migratory species - Access to the area may also result in increased poaching of wildlife and natural resources	Localised, Low negatives impacts
Operation vehicles and Earth-moving equipment and other mine activities	- Operation of vehicles and equipment may result in collisions with wildlife - Some animals may be drawn to the plant site by lighting, odour etc. leading hazards to both the wildlife and workers	Localised, Low negatives impacts

Noise, Dust / Air Pollution		
Noise from construction and operational activities, including vehicles by handling and hauling of the ore with the plant	<ul style="list-style-type: none"> - Noise may affect wildlife populations and other local receptors such as people living in nearby settlements / farms - Blasting may result in generation of excessive noise and vibrations 	Localised, Low negatives impacts
Dust from construction and operational activities, including handling and hauling of the ore with the plant	Ponds operations, haulage roads, waste-rock / stockpile, vehicle movement around and within the plant area can be a great source of dust	Localised, Low negatives impacts
Visual impacts and Waste generation		
Site selection during the pre-construction and construction of the quarry	The plant is located well behind a thicket of forest and thus less visible from the road, however precaution should be taken to reduce eye-sore	Localised, Low negatives impacts
Site layout, operation of the quarry and storage of the marble block	Scars on the topographic areas likely to be less visible from the sky and along the D3707 Road across the landscape	Localised, Low negatives impacts
Socio-economic concerns		
Development spin-off in the form of upgraded roads, water and energy benefits to local community	The development has the potential to contribute significantly toward rural development through upgrading of roads, provision of solar power for water supply	Localised, High positive impacts
Potential employment creation and uplifting of livelihoods of local community	The development has the potential to contribute toward employment creation and boost the micro-economy by supporting local SMEs	Localised, High positive impacts
Strain on Public gravel roads	The use of heavy trucks to move mined copper to the processing and marketing facilities may result in long-term damage to the local gravel road, unless if they are upgraded to bitumen standard	Localised, Low-to-medium negatives impacts
Land disturbance and reclamation	The footprint of the plant and its associated infrastructure, as well as waste rock may represent major concern due to the area extent required for operations	Localised, Low-to-medium negatives impacts
Plant operation water requirement might put strain local supply	Plant water volume is subject to influence by local precipitation, surface and groundwater ingress. Processing wastewater may contain high levels of metals content due to mobilised metals	Localised, Medium-to-high negatives impacts

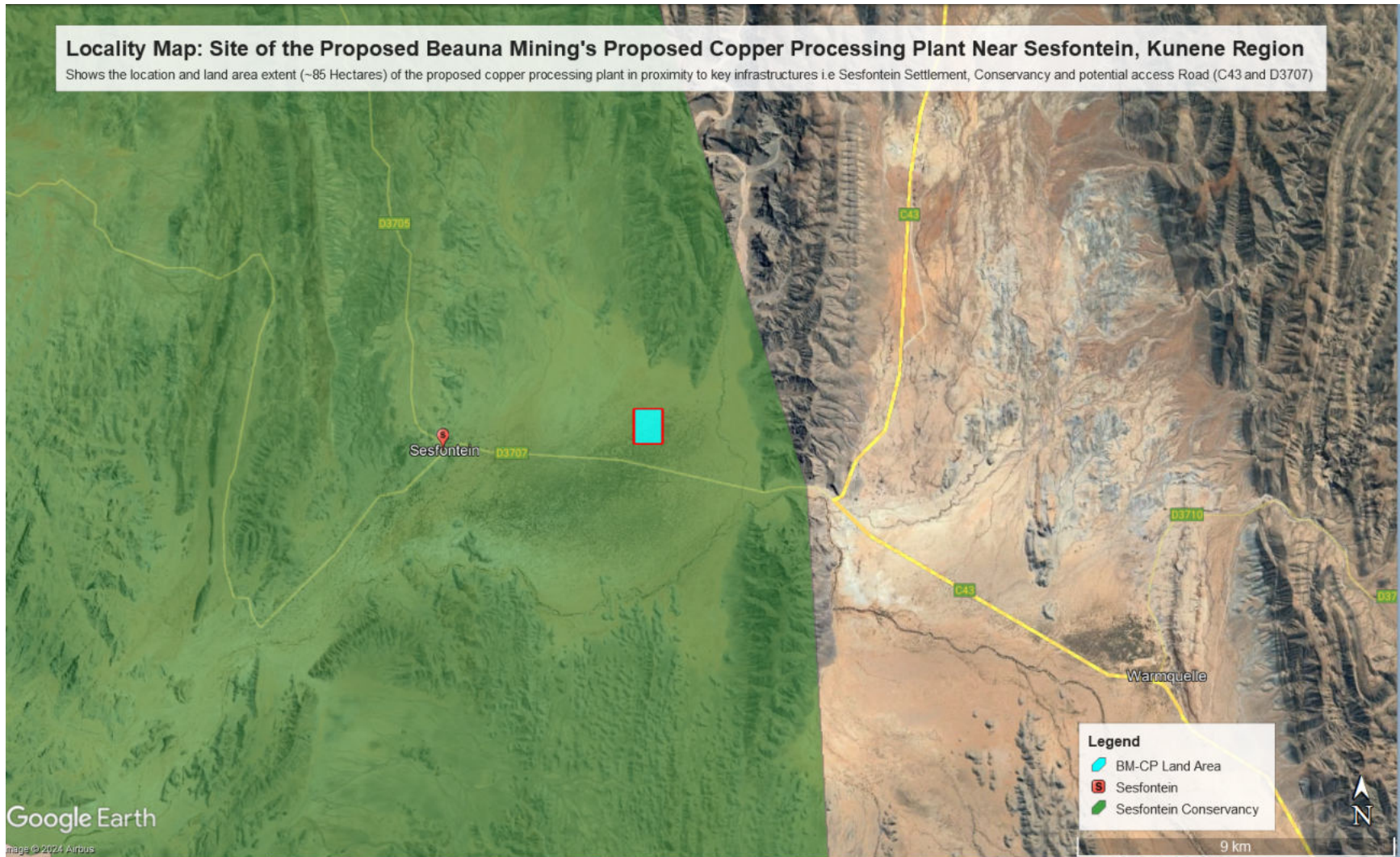


Figure 1: Show the location and area extent (85 Ha) of the proposed Copper Processing Plant in the Kunene Region

2. PURPOSE OF THE BID

- To ensure that the project information provided by the client is correct
- The BID provides the index for the EIA Scoping Exercise and EMP (similar to dichotomous keys). In other words, what is important, what should be assessed and how should it should be assessed.

3. PROJECT DESCRIPTION

Beauna mining (PTY) LTD embarks on an ambitious venture with its 3000 t/a cathode copper hydrometallurgy project.

The following supporting infrastructures and services will be required:

- (i) Processing Technique: Utilizing oxidized copper ore, the process involves crushing, grinding classification, pre-leaching dewatering, agitated leaching, counter-current washing, extraction, and electrowinning to produce cathode copper. The project's scale is set to handle 165,000t/a of raw ore, yielding 3,394t/a of cathode copper.
- (ii) Operational equipment: Multiple excavators, wheel-loaders, forklift loaders, diesel generator sets, four-cylinder mining machines, wire saw machines, semi-automatic drilling machines, containers, trucks, 4 by 4 cars and air-compressors.
- (iii) Storage of Chemicals, Fuels and lubricants: As back-up power supply, a Diesel Generator Sets shall be installed on-site. Therefore, there will be need to store some fuel and oils on-site, the exact volume will be determined during the assessment process. Other chemicals to be stored on-site includes Sulfuric acid (98%) Cobalt sulphate, Extractant (OPT5540), Gul gum, and No. 260 solvent oil.
- (iv) Water supply: Raw water will be sourced from local groundwater resources. The Proponent will utilise the existing boreholes and will also drill additional boreholes as may be required; An estimated total volume of 6015.92 m³/day ((5511.75 Freshwater blended with 441.92 Recycled water for production), and 15.8 m³/day Fresh Domestic water usage).
- (v) Energy requirements: The plant's electricity demand, calculated apparent power is estimated to total to 16.9468 million kW annual electricity consumption. Among them, primary load: installed load 368.7kW, operating load 368.7kW, active power 269.19kW, with these electricity applications already submitted to NORED and NamPower for consideration.

4. REGULATORY FRAMEWORK

4.1. Environmental Requirements under the Environmental Management Act

4.1.1. Environmental Management Act (No.7 of 2007)

The Environmental Management Act (also referred to as the EMA), stipulates that for each developmental project, which is listed under the EIA regulations, an Environmental Impact Assessment (EIA) should be conducted.

The aim of the EIA is to identify, assess and ascertain potential environmental impacts that may arise from the proposed activity. According to the EMA, an EIA is a process of identifying, predicting, interpreting and communicating potential impacts to interested and affected parties (I&APs).

The proposed prospecting activity triggers some listed activities in terms of the Environmental Management Act no. 7 of 2007 and the Environmental Impact Assessment Regulations of 6 February 2012 that may not be undertaken without an environmental clearance certificate (ECC). The triggered activities are shown in table 1.

The Environmental Impact Assessment Process

An EIA is a process that evaluates the likely environmental and social effects of a proposed project or development, which identifies suitable mitigation for to avoid or minimize the potential Impacts.

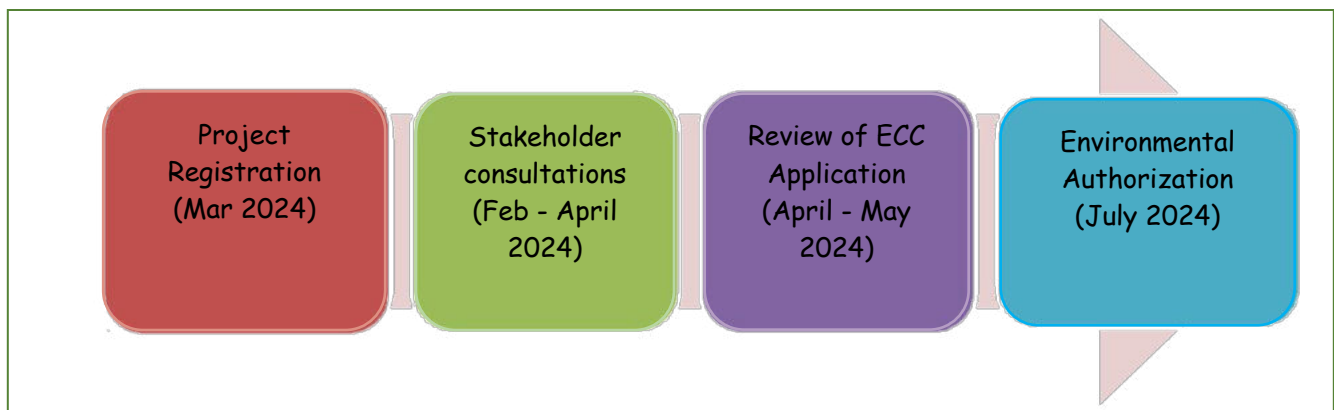


Figure 3: Anticipated Environmental Assessment Timeline

5. POTENTIAL ENVIRONMENTAL IMPACT ASSOCIATED WITH THE PROPOSED PROSPECTING ACTIVITIES

While the proposed exploration activities stimulate economic development and diversification in order to further create employment opportunities and thus trickling benefits to the larger Namibian population, it also create opportunity for unprecedented negative impacts.

Potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of visual intrusion, dust and noise pollution especially during the exploration phase and process. Below is a summary of the likely positive impacts that will be assessed for the different phases of the proposed exploration activities.

The following is a summary of the likely negative impacts that have been assessed for the different phases of the proposed exploration activities:

- i. Land use (Likely impacts are negligible; the M area and sites are isolated from the distant settlements, and conservation zones).
- ii. Noise (Likely impacts are low as the site is far from residential areas).
- iii. Ecological and biodiversity loss (Likely impacts are localized and low).
- iv. Health and safety (Overall likely impacts are low with correct PPE).
- v. Solid and hazardous waste management (Likely impacts are low with a solid waste management plan and minimal hydrocarbon fuel use).
- vi. Socioeconomic (Likely negative impacts are low)

6. STAKEHOLDERS CONSULTATION

As stipulated in the EIA Regulations (paragraphs 7 and 21), public consultation is a pre-requisite and forms an integral component of the EIA. Comments made during the consultation should be properly captured and addressed in both the EIA Scoping Report and EMP respectively.

Engaging and consulting with the public (residents, authorities etc.) and organizations that may be affected by, or interested in the proposed development allows for all parties to be informed of the proposals and provides an opportunity for views, opinions and concerns to be registered.

This process benefits the EIA and design development process as the public may provide information that may not be available otherwise, e.g. past experience and local knowledge, and local concerns and can be taken into consideration in the EIA. Engaging and consulting early on in the EIA process minimizes potential complaints and objections, and assists the ECC application process.

7. REGISTRATION AS AN I&AP

Registering as an Interested or Affected Party (I&AP) affords you an opportunity to be updated about the project and comment on the project, throughout the EIA process. All registered I&AP's will be provided with the draft scoping and EMP reports.

Your comments and questions are important, will add value to the EIA and will ensure that information that may not be available to the consultant is considered (e.g. past experience, local knowledge etc.).

To register or provide comments about the proposed project, please send an e-mail to: eap.trigen@gmail.com

COMMENT FORM

APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE IN RESPECT TO BEAUNA MINING (PTY) LTD.'S PROPOSED CONSTRUCTION AND OPERATION OF A HYDROMETALLURGY COPPER PLANT

Please submit the comment form via e-mail or post by **30 March 2024**.

Attention: Enviro-Leap Consulting cc
 Tel No: +264 81 486 9948
 Email: eap.trigen@gmail.com
 Postal Address: P.O. Box 25874, Windhoek

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION		E-MAIL	
POSTAL ADDRESS		POSTAL CODE	
TEL NO.		FAX NO.	
CELL NO.			

Please list any colleagues/friends or organizations that you feel should also be registered as Interested or Affected Party for the proposed project (with contact details if available).

Name / Organisation	Postal Address	Tel No.	E-mail

1. Please provide your comments below 3, write a formal letter or simply send an e-mail to: eap.trigen@gmail.com

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2. Your comment should not be limited by the space provided & you may submit as many pages, as necessary

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Thank you for the comments