

BACKGROUND INFORMATION DOCUMENT (BID)

ENVIRONMENTAL SCOPING ASSESSMENT (ESA) FOR THE PROPOSED ESTABLISHMENT AND OPERATION OF THE OTJIHEKE COPPER PROCESSING FACILITY LOCATED NEAR OPUWO, IN KUNENE REGION, NAMIBIA.

Environmental Consultant: Excel Dynamic Solutions (Pty) Ltd

Proponent: Helao World Energies CC

1 INTRODUCTION AND BACKGROUND

Helao World Energies CC (The Proponent) proposes to establish and operate a Copper Processing Facility. The proposed site is located southeast of Opuwo, in Kunene Region and covers a total surface area of 299.852 hectares. The project seeks to unlock Namibia's copper oxide resources through local beneficiation, including the side-blown smelting process, aligning with Namibia's mineral value-addition policies, ESG priorities, and localization objectives.

To fulfill the legal requirements, Helao World Energies CC has appointed Excel Dynamic Solutions (Pty) Ltd (EDS Namibia) as the independent team of Environmental Consultants, to conduct the required Environmental Assessment (EA) process and submit the ECC application to the Department of Environmental Affairs and Forestry (DEAF) at the Ministry of Environment, Forestry & Tourism (MEFT) in accordance with the Environmental Management Act, 2007 (Act No. 7 of 2007) and its 2012 Environmental Impact Assessment (EIA) Regulations.

This BID provides an overview of the proposed project and outlines the environmental assessment process, inviting interested and affected parties (I&APs) to register, review, and comment.

2 LEGAL AND REGULATORY FRAMEWORK

The following activities are among the listed that may not be undertaken without an ECC under the Environmental Management Act (EMA) (2007) and its 2012 Environmental Impact Assessment (EIA) Regulations. The project triggers the relevant listed activities as per EIA regulations are:

1. Activities 3.1: The construction of facilities for any process or activities which requires a license, right of other forms of authorization, and the renewal of a license, right, or other form of authorization, in terms of the Minerals (Prospecting and Mining Act, 1992).
2. Activity 3.2: Mineral processing, reduction, refining, and beneficiation.
3. Activity 3.3: Resource extraction, manipulation, conservation, and related activities.
4. Activity 9.4: Storage and handling of hazardous substances.
5. Activity 10.1: Infrastructure for bulk storage of chemicals.

The Proponent is therefore, required to obtain an ECC before the commencement of any works on the site.

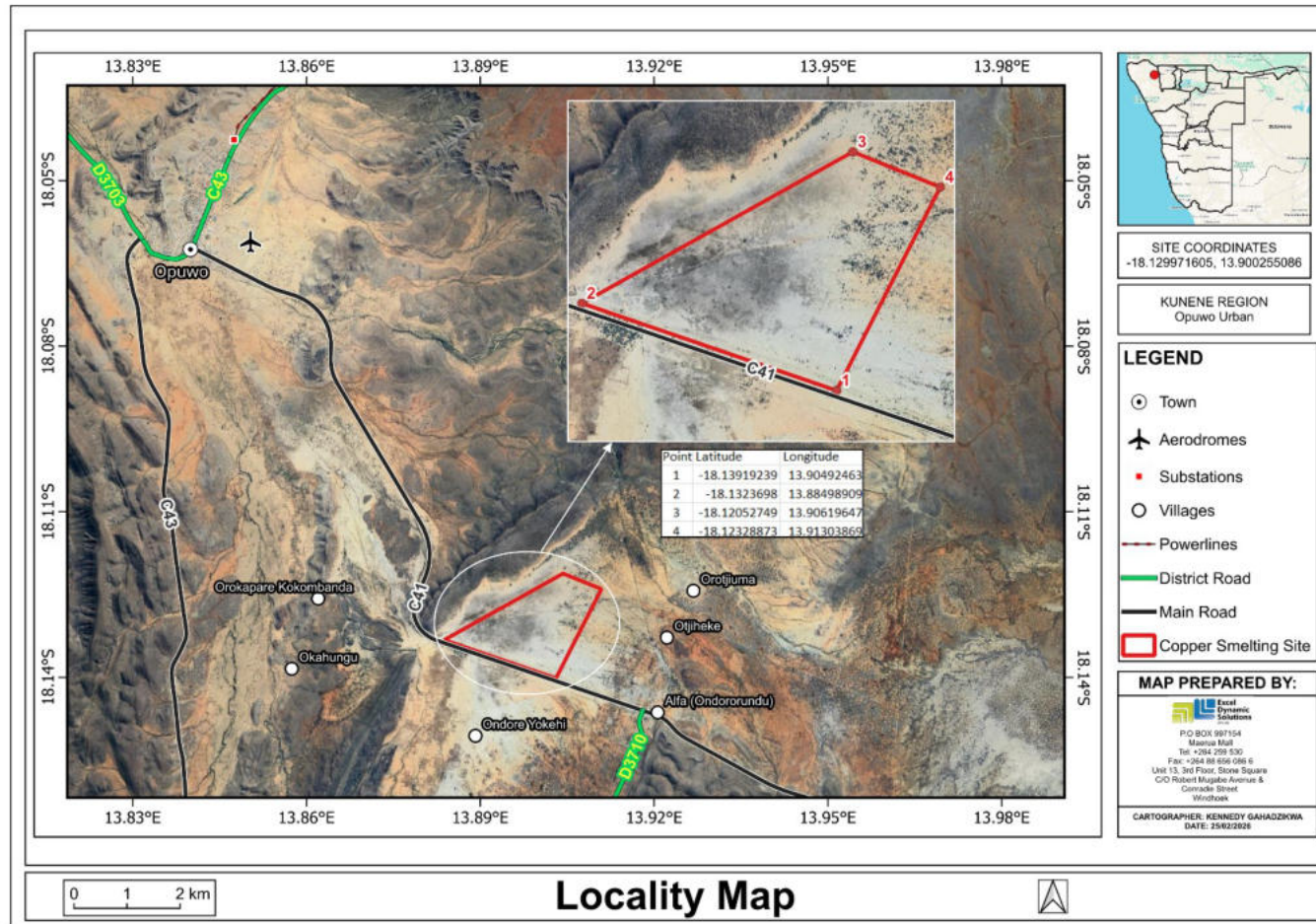


Figure 1: Locality Map for the copper processing facility

3 PURPOSE OF THIS DOCUMENT

It should be noted that the Background Information Document (BID) is not an EA Report but a non-technical summary of the EA, aimed for information purposes and a basis for public involvement from the beginning of the EA process. The motivation behind this document is to:

- Give background information of the proposed activity to I&APs, and give I&APs a chance to get information, remark and raise issues concerning the approval measure.
- Give background information to I&APs of the task, along these lines giving a chance to them (I&APs) to get information, remark and raise issues concerning the approval measure.
- Invite members of the public to register as I&APs and get added to the EA database in order to stay informed about the EA's progress throughout its process; and
- Provide all I&APs with an opportunity to comment or provide inputs/concerns on the proposed project activities, which entails concerns/issues on the biophysical and socio-economic aspects, and any other issues of concern related to the proposed project. The information from I&APs will form the basis of the EA and EMP documents which help the regulatory and competent authorities MEFT and MME, respectively; to pass judgment on the acceptability of the undertaking.

4 NEED AND DESIRABILITY OF THE ACTIVITY

The mining industry is one of the largest contributors to the Namibian economy; therefore, it contributes to the improvement of livelihoods. Mineral processing facilities have a great potential to enhance and contribute to the development of other sectors and provide employment, and taxes that fund social infrastructural development. The minerals sector yields foreign exchange and account for a significant portion of gross domestic product (GDP). Additionally, the industry produces a trained workforce and small businesses that can serve communities and may initiate related businesses.

5 PROJECT DESCRIPTION

The project is designed as an integrated mining and metallurgical operation. Mining activities will focus on copper oxide ore bodies within the project area, using conventional open-pit mining methods appropriate to the geology and scale of operations.

Extracted ore will be transported to an on-site beneficiation facility, where it will undergo crushing, screening, and X-ray fluorescence (XRF) sorting to improve ore grade and reduce processing volumes. The beneficiated material will then be fed into a side-blown smelting furnace, a proven and efficient technology suitable for copper oxide ores.

The smelting process will produce copper matte and blister copper, with appropriate handling and management of slag and tailings in accordance with environmental regulations. The plant has been designed with scalability in mind, allowing throughput to be increased as additional resources are developed and market conditions warrant expansion.

Once the Proponent has been issued with an ECC and obtained all relevant and required permitting licensing (such as consent and land use agreements), and is ready to commence with the actual activities (with financial, technical, and human resources in place), the planned activities will commence on site.

5.1 Project Phases

Phase	Duration	Key Activities
Construction & Commissioning	12 to 18 months	Construction and commissioning
Operations	30 years	Mineral processing
Decommissioning & Rehabilitation	24 months	Decommissioning and rehabilitation

5.2 Human Resources, Services, and Infrastructure

The following services and infrastructure as provided below will be required for the project activities:

- **Human resources and accommodation:** About 15-25 people will be employed during the construction phase. The workforce will be accommodated in the nearest town or on site upon reaching an agreement and consent is signed between the Proponent and the respective landowner or custodian before setting up accommodation structures (tented camps).
- **Working Space (Administration and Control):** Movable shade facility near the construction site and prefabricated temporary offices will be erected on-site (subject to the approval of the landowner/custodian or authority).
- **Water supply:** About 6000 liters of water will be required per month for the construction activities. This water will be used for cooling down and washing

equipment, drilling-related activities, and ablution. Potable water will also be made available for the crew (workers) on site in industry water storage tanks.

- The water will be sourced from local groundwater resources, utilizing the existing boreholes with permits
- **Fuel Supply (machinery and equipment):** Solar energy and diesel will be used for machinery and equipment and fuel generator.
- **Accessibility (roads):** The project site is accessible via the C41 and track roads that lead to the site. Therefore, project-related vehicles will be using these existing roads to access it. The Proponent may need to do some upgrades on the site access road to ensure that it fit to accommodate project-related vehicles, such as heavy trucks.
- **Waste management:** Different waste will be handled as follows:
 - **Sewage:** Mobile chemical ablution facilities will be provided on-site. The wastewater will then be transported offsite to the treatment facility either by the Proponent or a designated/appointed external waste management contractor.
 - **General and domestic waste:** Sufficient waste containers will be made available at the site and campsites for waste storage. The bins will be emptied into the main onsite container for disposal at the nearest landfill site, when necessary (upon reaching full capacity of the main waste container onsite).
 - **Hazardous waste:** All vehicles, machinery, and fuel-consuming equipment will be provided with drip trays to capture potential fuel spills and waste oils. The waste fuel/oils will be carefully stored in a standardized container until such a time that they can be disposed of at the nearest approved hazardous waste management facility. The nearest considered facility town is Opuwo; therefore, a waste disposal agreement will be reached between the Proponent and the Town Council.
- **Health and Safety:** Adequate and appropriate Personal Protective Equipment (PPE) will be provided to every project personnel while working at the site. A minimum of two first aid kits will be readily available at the site to attend to potential minor injuries, while major injuries will need to be attended by transporting the injured to the nearest healthcare facility for treatment and necessary care.
- **Potential Accidental Fire Outbreaks:** A minimum of basic firefighting equipment, i.e., two fire extinguishers will be readily available in vehicles, at the working sites and campsite.

5.3 Project Equipment, Material, Machinery, and Vehicles

The following equipment and machinery will be required:

- 4X4 vehicles
- Truck
- Excavator / front-end loader
- Dozer/s (to clear vegetation along planned drilling site access roads)
- Drilling fluids stored in manufacturers approved containers
- Air compressors
- Generator for power supply

This equipment, machinery, and vehicles will be kept at a designated storage site that will be established within the proposed site.

6 ENVIRONMENTAL ASSESSMENT

This ESA process is conducted following the provisions stated in the Environmental Management Act (No 7 of 2007) and its Environmental Impact Assessment Regulations (2012). The primary objective of the EA will be to identify potential negative impacts associated with the proposed activity, assess them, and recommend practical and effective mitigation measures to be implemented by the Proponent, to minimize these impacts while maximizing positive impacts.

The main objectives of this ESA are to:

- Comply with Namibia's Environmental Management Act (2007) and its EIA regulations (2012).
- Identify potential impacts associated with the proposed activity.
- Inform Interested and Affected Parties (I&APs) and relevant authorities about the mining activities and provide them with a reasonable opportunity to participate during the EA process.
- Assess the significance of issues and concerns raised.
- Compile a report addressing all identified issues and potential impacts related to various aspects of the activity.
- Compile a Draft Environmental Management Plan (EMP) which includes impacts management and mitigation measures.

7 PRE-IDENTIFIED POTENTIAL IMPACTS

The following potential impacts have been identified:

Positive:

- Socio-economic development through employment creation and skills transfer for local residents during construction and operations.
- Opens up other investment opportunities and infrastructure-related development benefits.
- Produce a trained workforce and small businesses that can service communities and may initiate related businesses.
- Boosting the local economic growth and regional economic development.
- Increased support for local businesses through the procurement of consumable items such as Personal Protective Equipment (PPE), machinery spare parts, lubricants, etc.

Negative:

- Soil and land disturbance during site preparation.
- Spillage or leakage of acid, diesel, or process solutions.
- Localised dust and noise from generators and traffic.
- Improper disposal of waste or residues.
- Occupational health and safety risks.

The potential impacts listed above are pre-identified and therefore should not be deemed as final or the only ones. Other potential impacts will be identified as the EA process progresses i.e., upon site visit and consultation with the public (I&APs). All impacts and public concerns/comments will be incorporated and addressed in the Environmental Assessment Report and EMP.

8 PUBLIC CONSULTATION

Public consultation is an important part of the EA process. During the consultation process, interested or affected members of the public are allowed to find out more about the activity and raise any issues or concerns about the environmental assessment.

To comment or receive further information on the project, **please register with Excel Dynamic Solutions (Pty) Ltd** as an Interested and Affected Party (I&AP)

All registered I&APs will be kept informed throughout the various stages of the project.

Public consultation meeting details will be communicated with all the registered I&APs in due course (contact details herein)



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