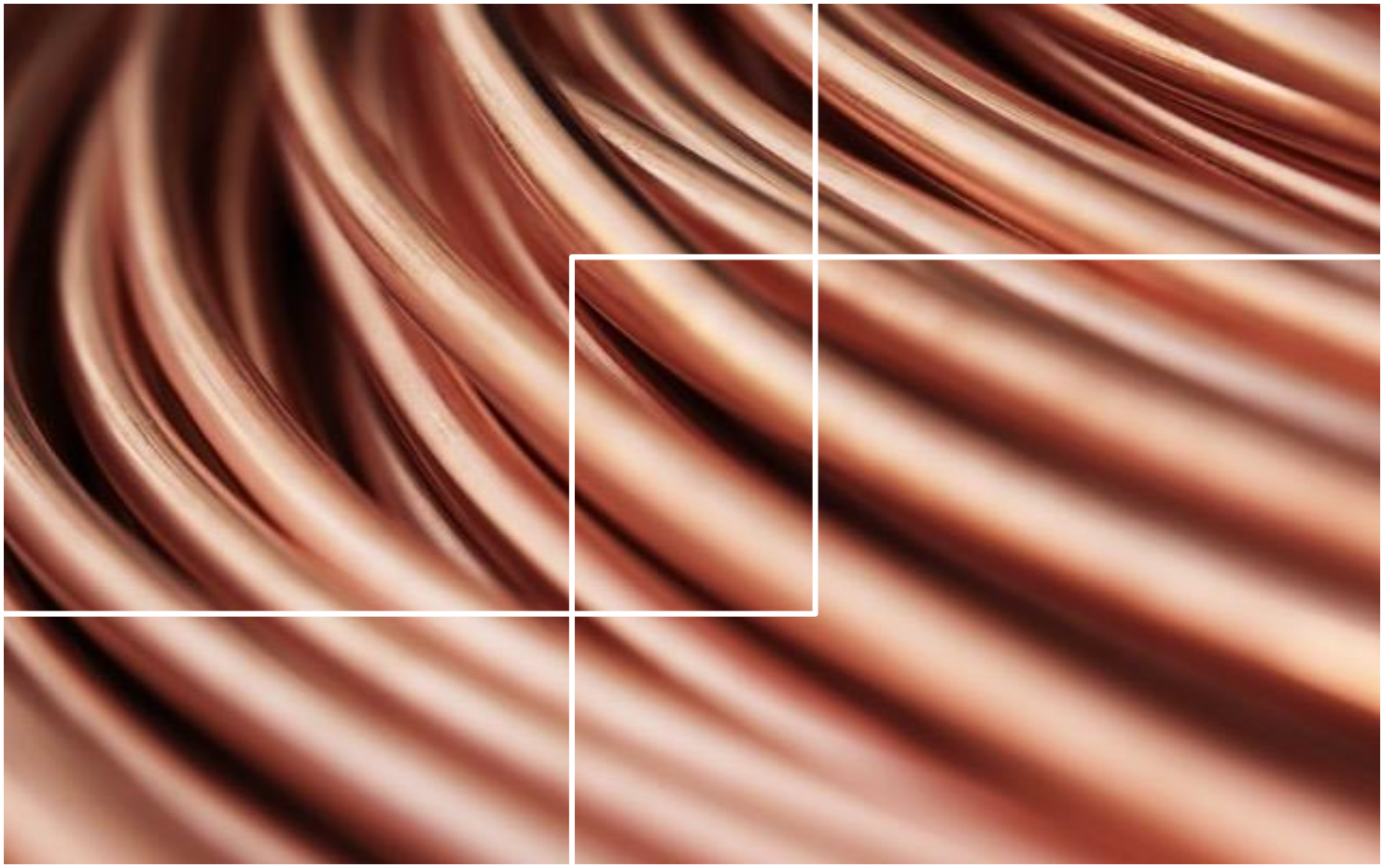

CRATON
Mining and Exploration
(Pty) Ltd

REPORT:

BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED OMITIOMIRE COPPER MINE ON ML 197, KHOMAS REGION, NAMIBIA.

PROJECT NUMBER: ECC-134-394-BID-02-A

REPORT VERSION: REV 01

DATE: 17 JUNE 2022

Prepared by:

ECC
ENVIRONMENTAL
COMPLIANCE CONSULTANCY

TITLE AND APPROVAL PAGE

Project Name:	Background information document for the proposed Omitiomire Copper Mine on ML 197, Khomas Region, Namibia.
Client Company Name:	Craton Mining and Exploration (Pty) Ltd
Client Name:	Mr Mike Stuart
Authors:	Monique Jarrett, Lester Harker, and Jessica Bezuidenhout
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ENVIRONMENTAL COMPLIANCE CONSULTANCY CONTACT DETAILS:

We welcome any enquiries regarding this document and its content. Please contact:

Environmental Compliance Consultancy
PO Box 91193, Klein Windhoek, Namibia
Tel: +264 81 669 7608
Email: info@eccenvironmental.com

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1.1 PURPOSE OF THIS DOCUMENT

Environmental Compliance Consultancy (ECC) has been appointed by Craton Mining and Exploration (Pty) Ltd as their environmental assessment practitioner (EAP) to revise and update the environmental and social impact assessment (ESIA) for the proposed open pit and heap leach mining activities within ML 197, Khomas Region, Namibia.

The purpose of this background information document (BID) is to provide interested and affected parties (I&APs) a background to the proposed Project and to invite I&APs to register as part of the environmental and social impact assessment (ESIA) process.

All registered I&APs will be kept informed throughout the ESIA process. Registration provides a platform for participants to submit comments, concerns or recommendations regarding the proposed Project. This BID includes the following information:

- The proposed project overview and location;
- The necessity of the Project, benefits or adverse impacts anticipated;
- The alternatives within the Project that will be considered and assessed;
- How the ESIA process works;
- The public participation process and how to become involved; and
- The next steps and the way forward.

1.2 DESCRIPTION OF THE PROPOSED PROJECT

Craton Mining and Exploration (Pty) Ltd holds mining licence 197 (ML 197) over farm Omitiomire, located 140km northeast of Windhoek (by road) and approximately 39km south of Hochfeld, in the Khomas Region of Namibia.

The exploration which Craton has undertaken since 2007 at Omitiomire has resulted in a mineral resource of approximately 105.5 million tonnes at 0.59% Copper (Cu). Most of the deposit is in the form of copper sulphides, specifically chalcocite, containing high proportions of copper and low proportions of sulphur. The copper sulphides have been oxidised near the surface to approximately 40m, and at depth next to major fractures and fault lines. The oxidised copper ores, mainly malachite, make up approximately 10% of the total mineralisation.

The proposed mine includes one opencast pit, an ore processing plant, heap leach pads, waste rock dumps, a leached ore deposition facility, workshops, water management infrastructure, related support services and facilities, and an onsite accommodation facility. The mining operation is expected to produce an estimated amount of 100 Mt of ore with an approximate pit depth of

250m. There is also a proposed diversion of main road (M53), and the Black Nossob River to accommodate the pit dimensions.

1.3 PROPOSED INFRASTRUCTURE LAYOUT

Figure 1 - Infrastructure layout

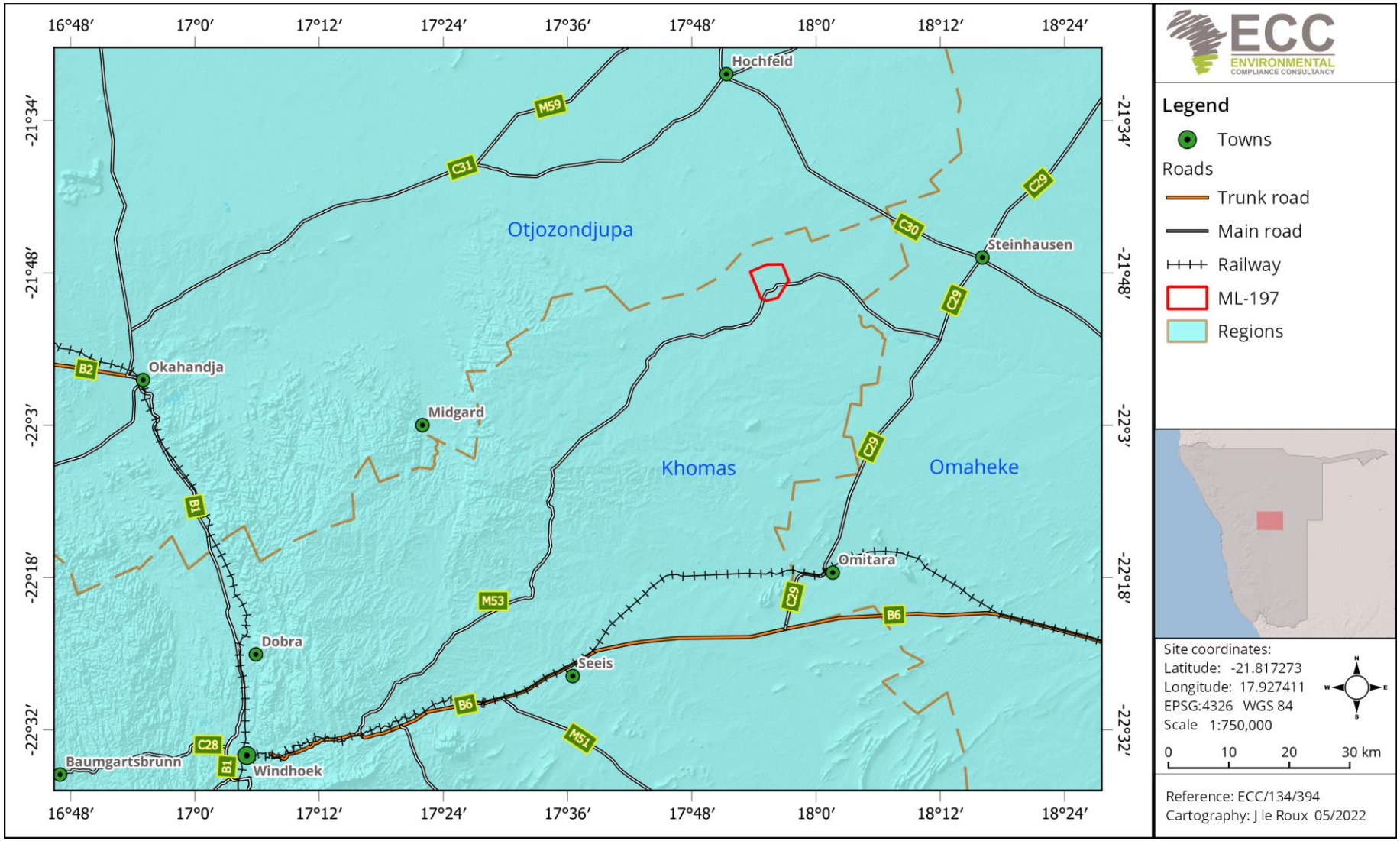

Figure 2 – Site locality map

1.4 EXPLORATION AND PROJECT PROGRESS

Exploration and resource development of the Omitiomire Copper Project to date has defined the and mineral resources as set out in Table 1.

Table 1 – 2022 and mineral resource

Class	Tonnes (Mt)	Grade (Cu%)	Cont. Metal (Cu Kt)
Measured	15.4	0.61	94.4
Indicated	80.4	0.58	468.9
Total MI	95.8	0.59	563.3
Inferred	9.7	0.57	55.1
Total	105.5	0.58	618.4

1.5 CONSTRUCTION AND OPERATIONAL PHASES

The current preliminary economic assessment (PEA) has indicated that the deposit can be economically mined and treated using heap leach and solvent extraction / electrowinning (SXEW) to produce pure cathode copper. The current schedule indicates that the open pit will be mined out in approximately 15 years.

The construction phase is expected to take 24 months and will create approximately 700 jobs. The operational phase will employ an estimated 600 people on site and additional support staff in the Windhoek office. The mine and related infrastructure will comprise the following:

- Workshops;
- Open-pit mining;
- Heap leach pads;
- Waste rock dumps (WRD);
- Leached Ore deposition facility (TDF);
- Water management infrastructure;
- Support services and facilities (offices, communications structures, etc.);
- A contractor and mine employee accommodation, with a canteen and recreation facilities; and
- Fencing around the entire site, and security fencing around the mine and accommodation facilities.

The pit depth averages to 250m, will be mined as an open pit with a conventional drill, blast, load and haul mining configuration. Ore will be transported to the heap leach pads by haul trucks and waste rock to a waste rock dump.

The processing plant comprises of the following processing steps: two-stage crushing and screening, agglomeration and stacking on the heaps, leaching, solvent extraction and electrowinning to produce pure copper cathode.

The mined ore will be crushed, agglomerated and stacked on an impermeable plastic and clay lined leach pad where it will be irrigated with a leach solution to dissolve the copper. The solution will then percolate through the heap. The leach solution containing the dissolved copper will then be collected and treated in the process plant to recover the copper via SXEW. The now barren solution is then recycled back to the leach pads in a closed circuit.

The mine and plant will work weekly shifts, twenty-four hours a day and employees will be accommodated on-site. Operational management will be provided by Craton personnel and a contract miner. The accommodation facility will comprise of a kitchen, mess hall, laundry, a recreational centre. and potentially sports fields, for example, soccer, basketball, and volleyball. Access to both the mine site and the village will be strictly controlled.

Water supply will be from Otavi mountainland via the NamWater canal system and pumped to site at approximately 400m^3/hr. Power may be supplied by a solar power plant or via accessing the existing NamPower supply. The entre mine site and accommodation will be surrounded by high security fencing and access strictly controlled.

1.6 NEED FOR THE PROJECT

New mining activities will contribute to the national and local economies and have a positive impact on the country's economy. Namibia's economy depends largely on mining. Should the Project prove economically viable, the Namibian economy will benefit from revenues and employment during the construction phase, royalties and taxes during the life of mine (LoM) and a positive contribution towards employment, local skills development and training.

1.7 CONSIDERATION OF ALTERNATIVES

Best practice environmental assessment methodology calls for consideration and assessment of alternatives within the proposed Project. During the assessment phase, alternatives will be considered and assessed. The alternatives will aim to optimise designs and processes to reduce potential impacts. Some aspects where alternatives may be required could include:

- Different types of technology or operation;
- Access;
- Diversion of the M53 road and the Black Nossob River;
- Water supply; and
- Power supply.

2 THE ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROCESS

The ESIA for the proposed Project is being conducted by ECC and will be undertaken in terms of the Environmental Management Act, No.7 of 2007 and its associated Regulations. The process followed for this ESIA is set out in the flowchart in Figure 3.

ECC has been contracted by Craton Mining and Exploration (Pty) Ltd, as the independent Environmental Assessment Practitioner (EPA), to facilitate the whole ESIA process. Prior to the start of the proposed Project, an environmental clearance certificate has to be issued in terms of the Environmental Management Act, 7 of 2007 and the associated EIA Regulations.

A final decision relating to the above-mentioned application will be made by Ministry of Environment, Forestry and Tourism (MEFT): Department of Environmental Affairs (DEA).

The related environmental process will include:

1. Screening phase (completed);
2. Scoping phase which includes baseline studies and the development of the Terms of Reference (ToR) for the ESIA (initiated); and
3. Assessment phase which includes impact prediction and evaluation of alternatives, assigning mitigation measures and developing monitoring and conceptual rehabilitation plans. This phase culminates in the drafting of the ESIA report and environmental management plan (EMP) and submission to the appropriate competent authorities (future phase).

The main objectives of the ESIA are to:

a) Provide information describing the proposed Omitiomire Copper Mining Project and associated activities;
b) Provide an independent environmental and social assessment of the activities associated with the proposed Project; and
c) Develop management and mitigation measures associated with any identified potential impacts where necessary.

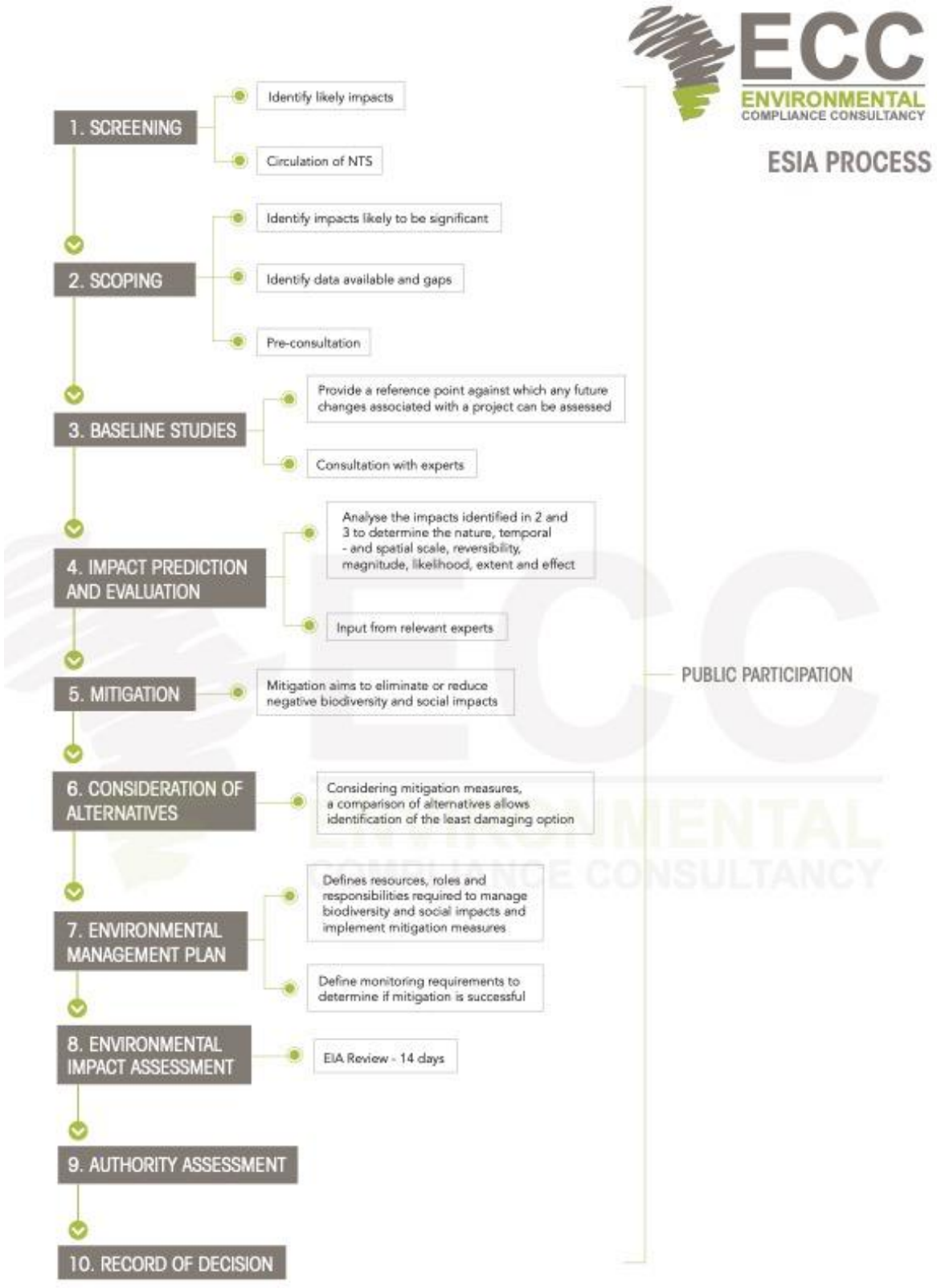

Figure 3 - Flowchart of the environmental and social assessment process

2.1 SCREENING

In terms of section 32 (1) of the Environmental Management Act, No. 7 of 2007, ECC has determined that the Ministry of Mines and Energy (MME) is the competent authority for the proposed mining Project. Mining activities trigger the Environmental Management Act and associated Regulations as it involves undertaking listed activities. The relevant listed activities are provided in Table 2.

A review of the planned Project was undertaken and the screening findings against the listed activities was conducted; the findings of which are summarised in Table 2.

Table 2 – Listed activities triggered by the proposed project

Listed Activity	Mining Activity
ENERGY GENERATION, TRANSMISSION AND STORAGE ACTIVITIES The construction of facilities for: (1a) The generation of electricity. (1b) The transmission and supply of electricity.	- The Omitiomire Copper Project will need to generate and or transmit electricity for its operations. - It is very likely that the proposed Project will connect to the national power grid supplied by NamPower. - Alternatively, the Proponent may possibly consider developing a renewable energy plant (i.e. solar) for the generation of supplementary power.
WASTE MANAGEMENT, TREATMENT, HANDLING, AND DISPOSAL ACTIVITIES (2.1) The construction of facilities for waste sites, treatment of waste and disposal of waste. (2.2) Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976.	- Facilities for the disposal of waste will need to be constructed. - In terms of the Atmospheric Pollution Prevention Ordinance, the bulk storage and handling of mineralised or metallic ore on waste dumps designed to hold 100 000 metric tonnes or more, is defined as a scheduled process.

Listed Activity	Mining Activity
(2.3) The import, processing, use and recycling, temporary storage, transit or export of waste.	
MINING AND QUARRYING ACTIVITIES (3.1) The construction of facilities for any process or activities which requires a license, right or other form of authorization, and the renewal of a license, right or other form of authorization, in terms of the Minerals (Prospecting and Mining Act), 1992. (3.2) Other forms of mining or extraction of any natural resources whether regulated by law or not. (3.3) Resource extraction, manipulation, conservation and related activities.	- This listed activity infers the provisions of the Minerals (Prospecting and Mining) Act 33 of 1992. The very nature of the Project is mining, which therefore triggers this listed activity.
FORESTRY ACTIVITIES (4.) The clearance of forest areas, deforestation, afforestation, timber harvesting, or any other related activity that requires authorisation in terms of the Forest Act, 2001 (No. 12 of 2001) or any other law.	- Vegetation clearing will be required for site construction and infrastructure establishment. - During operations, vegetation clearing will be required as the Project develops.
WATER RESOURCE DEVELOPMENT (8.1) The abstraction of ground or surface water for industrial or commercial purposes. (8.2) The abstraction of groundwater at a volume exceeding the threshold authorised in terms of the law relating to water resources. (8.4) Construction of canals and channels, including the diversion of the normal flow of water in a riverbed, and water transfer schemes between water catchments and impoundments. (8.5) Construction of dams, reservoirs, levees, and weirs.	- Ground and surface water may be abstracted to support the operation. - Dewatering the pit will be required to ensure safe mining operations. - Water may be sourced from the Otavi Mountain land via the Namwater canal system through a pipeline system and pumped to the site at approximately 400m3/h. - Pipeline systems will be used to transport water or slurry within the site. - River diversion of the Black Nossob River.

Listed Activity	Mining Activity
(8.6) Construction of industrial and domestic wastewater treatment plants and related pipeline systems. (8.8) Construction and other activities in watercourses within flood lines. (8.9) Construction and other activities within a catchment area.	
HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE (9.1) The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974. (9.2) Any process or activity which requires a permit, licence or other form of authorization, or the modification of or changes to existing facilities for any process or activity which requires amendment of an existing permit, licence or authorization or which requires a new permit, licence or authorization in terms of a governing the generation or release of emissions, pollution, effluent or waste. (9.4) The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location.	- The mining operations and proposed process plant triggers this activity, as both fuel and hazardous substances are required for mining and processing. - Bulk fuel may be required for onsite generation of electricity and for refuelling the mining fleet. - Consumer installation certificates are required for bulk fuel storage and dispensing. - Hazardous reagents will be used within the copper extraction and processing plant.
INFRASTRUCTURE 10.1 The construction of: (j) masts of any material or type, and of any height, including those used for telecommunication broadcasting and radio transmission. (b) public roads	- Powerlines and telemetry for water and tailings pumping will be required. - Diversion of the M53 district road.

2.2 SCOPING

The scoping phase is directed towards defining the range and nature of anticipated potential impacts that may have a significant impact on the biophysical and social environments based on the scale of the proposed operations. The appropriate available data and literature are identified, forming the starting point for the assessment against project aspects. Specialist studies may be required for the assessment of potential impacts, which will require the development of targeted specialist ToRs.

2.3 BASELINE STUDIES

For the proposed Project, baseline information will be obtained through all available field surveys and the existing specialist studies as well as any extra specialist studies due to any gaps identified. These studies also give a further indication of whether there are any local or regional future developments that could impact the Project or vice versa

The ESIA will focus on the environmental receptors that could be affected by the proposed Project. ECC will also engage with stakeholders, I&APs and the Proponent to seek input into the assessment. The baseline studies chapter is broken into three sections; the baseline context, environmental (physical and biological) and social (includes economic) contexts.

Lastly, the socio-economic section of the baseline studies helps to present information on the governance, demographic profile, social stratification (employment, education, crime, infectious disease), occupation, and livelihoods of those potentially affected (economic activities, occupations in the study area, employment rates). Land patterns (noise and vibrations) and access to services (drinking water, sanitation, healthcare facilities, etc.) will also be described.

2.4 TERMS OF REFERENCE

Based on the stakeholder engagement outcome through the defined public consultation process, including any written correspondence and the baseline studies, the ToR for the impact assessment will be finalised and confirmed with the Environmental Commissioner.

2.5 STAKEHOLDER ENGAGEMENT

The public and key stakeholders receive invitations to register as I&APs through newspaper adverts placed in the public domain, site notices placed onsite or on the boundary of the site and direct mail. After the presentation of the proposed Project and ESIA process through the defined public consultation process, a period of time for input will be granted for the environmental assessment practitioner (EAP) to receive any additional concerns or comments raised from registered I&AP's. All feedback from the initial public consultation process will be incorporated into the scoping report.

2.6 SCOPING REPORT

The scoping report will be drafted and made available to the registered I&APs for comment before being submitted to the competent authority and MEFT. The scoping report will contain a description of the Project and the biophysical and socio-economic environments, the stakeholder engagement report, and the terms of reference for the ESIA.

2.7 ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PHASE

2.7.1 POTENTIAL IMPACTS

The potential environmental and social impacts should be considered with due regard to the nature and scale of the proposed operations its location within the broader ecological, commercial and social environments. The potential environmental and social impacts that have been anticipated may include the following:

- River diversion;
- Water use, contamination and management;
- Waste management;
- Visual impacts;
- Biodiversity impacts;
- Socio-economic and social impacts; such as job creation, staff housing and accommodation;
- Potential air quality pollution impacts;
- Noise, vibration and blasting impacts, and
- Road diversion.

2.7.2 DRAFT ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

An EMP shall be developed for the proposed Project setting out auditable management actions for the Project to ensure careful and sustainable management measures are implemented for their activities in respect of the surrounding environment and community. The EMP becomes the legally binding commitments upon approval of the EMP and issuing of the environmental clearance certificate. Environmental clearance certificates are issued for a period of 3 years and renewal is subject to compliance with the provisions and conditions of the environmental clearance certificate.

3 THE WAY FORWARD – PUBLIC PARTICIPATION

Public participation is an important part of the ESIA process. It allows you, the public and stakeholders to raise concerns or provide valuable local environmental knowledge that can benefit the assessment process as well as aid the planning process for the scoping phase of the defined assessment process. At this phase ECC will perform the following:

- Prepare and submit the application for the environmental clearance certificate in the prescribed manner
- Identify relevant key stakeholders, authorities, environmental groups and interested or affected members of the public, hereafter referred to as I&APs
- Carry out a public consultation process in accordance with Regulation 21 of the EMA 2007 including:
    - Distribute the BID for the proposed Omitiomire Copper Mining Project (this document).
    - Advertise the environmental application and call for registration of I&APs in two national newspapers.
    - Open an I&AP register, record all comments of I&APs and present such comments, as well as responses provided by ECC in the comments and responses trail, which will be included in the scoping report that shall be submitted with the application.
- Prepare a scoping report and provide the same to registered I&APs for comment
- Submit the scoping report and the I&AP comments to the competent authority and Environmental Commissioner for a record of decision

Your request for registration as an I&AP as well as any comments on the BID or Project must be submitted in writing and can be emailed using the details in the contact us section below. Registration as an I&AP for the Project can be completed online on ECCs website on the projects page, or by using this link: https://eccenvironmental.com/download/the-proposed-omitiomire-copper-mine-on-ml-197/

Registration as an I&AP should be submitted on or before 19 July 2022.

We welcome any enquiries regarding this document and its content. Please contact:
Environmental Compliance Consultancy (ECC)
info@eccenvironmental.com
Tel: +264 816 697 608
www.eccenvironmental.com
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