EXPLORATION ACTIVITIES ON EPL 7536
FOR BASE AND RARE METALS, PRECIOUS METALS
OMAHEKE REGION

PREPARED FOR

KUISEB COPPER COMPANY (PTY) LTD

DECEMBER 2020
**EXPLORATION ACTIVITIES ON EPL 7536**
**KUISEB COPPER COMPANY (PTY) LTD**

**DECEMBER 2020**

**REV 01**

**PAGE 2 OF 95**

---

### TITLE AND APPROVAL PAGE

**Project Name:** Proposed exploration activities on EPL 7536 for base and rare metals, precious metals within the Omaheke Region

**Client Name:** Kuiseb Copper Company (PTY) LTD

**Ministry Reference:** NA

**Authors:** Lester Harker and Jessica Bezuidenhout

**Status of Report:** Final for government submission

**Date of issue:** December 2020

**Review Period** NA

---

### ENVIRONMENTAL COMPLIANCE CONSULTANCY CONTACT DETAILS:

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

**Stephan Bezuidenhout**
Environmental Consultant & Practitioner
Tel: +264 81 669 7608
Email: stephan@eccenvironmental.com
www.eccenvironmental.com

**Jessica Bezuidenhout (Mooney)**
Environmental Consultant & Practitioner
Tel: +264 81 669 7608
Email: jessica@eccenvironmental.com
www.eccenvironmental.com

---

### CONFIDENTIALITY

Environmental Compliance Consultancy Notice: This document is confidential. If you are not the intended recipient, you must not disclose or use the information contained in it. If you have received this document in error, please notify us immediately and delete the document and any attachments. Any personal views or opinions expressed by the writer may not necessarily reflect the views or opinions of Environmental Compliance Consultancy or its client.

*Please note at ECC we care about lessening our footprint on the environment; therefore, all documents are printed double sided.*
EXECUTIVE SUMMARY

Kuiseb Copper Company (Pty) Ltd (herein referred to as the proponent), intend to undertake exploration activities on Exclusive Prospecting Licence (EPL) 7536 for base and rare metals, precious metals in the Omaheke region, in an area south west Gobabis.

The proposed project triggers listed activities in terms of the Environmental Management Act, No. 7 of 2007, therefore an environmental clearance certificate is required. As part of the environmental clearance certificate application, an Environmental Impact Assessment (EIA) has been undertaken to satisfy the requirements of the Environmental Management Act, No. 7 of 2007. This environmental scoping report and Environmental Management Plan (EMP) shall be submitted herewith, to the competent authority as part of the application for the environmental clearance certificate.

The proposed exploration activities on EPL 7536 may include soil sampling, ground geophysical surveys and airborne electromagnetic surveys (at a coarse line spacing), geological mapping, and exploration drilling in selected target areas. Some limited bush-clearing may be required, for the creation of working areas and access tracks where necessary for the creation of working areas and access tracks where necessary. All sites of activity will be managed according to stringent environmental requirements that the proponent upholds in its exploration projects. Access agreements will be entered into with all farmers / holders of private ground which may be accessed.

The exploration activities will commence as soon as an environmental clearance certificate has been granted by the Environmental Commissioner. Activities are expected to be conducted over a 3-years period, which is the duration of the exploration licence. However, the period of each phase of the exploration programme may vary and will be refined as geological information becomes available. In the event that exploration is successful, and a commercially viable mineral resource is defined, exploration operations can potentially transcend into mining operations. This phase will be assessed in a separate and detailed environmental impact assessment at the appropriate stage.

EPL 7536 is covered with the central Kalahari vegetation type of the Acacia tree-and-shrub savanna sub-biome. Where the soils are shallower and the landscape hillier, plant growth tends to be shrubby. Eastwards, where the soils become deeper and the landscape flattens, vegetation is characterized by large, open expanses of grass dotted by trees and bushes (Mendelsohn et al., 2002). Most of the woody vegetation vary between 1 and 5m in height.

Bush encroachment is noticeable, mainly on farmland exposed to continuous periods of selective grazing by livestock. Moreover, the densification of bush has led to a decreased carrying capacity on some farms in the area where EPL 7536 is located.

The impacts of exploration activities with respect to airborne dust are expected to be limited to vehicular traffic, or localised to possible RAB drill sites. There will be some release of exhaust fumes from machinery that will impact the immediate vicinity but will be of short duration. Additionally, there will be associated drilling and machinery noise, which could be a disturbance to immediate neighbours, but this will be of short duration as well.
Through further investigation, it was determined that the effects from noise are considered to be of minor significance, however with additional mitigation, the significance is reduced to low. The additional mitigation measures include:

- Residents shall be provided at least two weeks’ notice of drilling operations within 1km of their property;
- Activities will be minimized to allocated daylight working hours;
- Continual engagement with residents shall be undertaken by the proponent to identify any concerns or issues, and appropriate mitigation and management measures shall be further agreed; and
- Noise suppression measures shall be applied if drilling occurs in locations that may affect residents.

Water is a scarce and vital resource in Namibia and, as such, must always be treated with caution. EPL 7536 is located on the drainage basin of the Black Nossob River. The river originates on the eastern parts of the Khomas Hochland in central Namibia and is ephemeral. The Black Nossob confluences with the White Nossob to its west to form the Nossob River, which eventually forms the border between Botswana and South Africa after it leaves Namibian territory.

EPL 7536 is located in the South-eastern Kalahari Groundwater Basin only. The general direction of the groundwater flow is southwest over the western half and east over the northeast. This basin shows a generally moderate potential of groundwater with an increased potential to the north (Christelis and Struckmeier, 2001).

This study concluded that a potential environmental risk, which may require further investigation, is related to the cumulative impacts as a result of visual disturbance, nuisance of noise and the loss of sense of place. Receptors are farm owners and their neighbours. Through further investigation, it was determined that the visual disturbance and temporary qualitative reduction in the sense of place is considered to be of moderate significance, however with additional mitigation, the significance can be reduced to minor. These additional mitigation measures include:

- Positioning of drill equipment in such a way that it is out of sight from human receptors;
- Barriers or fences shall be used if drilling occurs in locations that may affect residents or livestock;
- Residents need to be informed at least two weeks in advance that drilling operations are within 1km of their property; and
- Continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon.

The overall potential impact of this proposed project is not considered significant as it does not widely exceed recognised levels of acceptable change, does not threaten the integrity of the receptors, and it is not material to the decision-making process. The assessment is considered to be comprehensive and sufficient to identify impacts, and it is concluded that no further assessment is required.
# TABLE OF CONTENTS

1  INTRODUCTION ............................................................................................................................................... 9  
   1.1  PROJECT OVERVIEW ............................................................................................................................... 9  
   1.2  SCOPE OF WORK ....................................................................................................................................... 10  
   1.3  THE PROponent OF THE PROPOSEd PROJECT ......................................................................................... 11  
   1.4  ENVIRONMENTAL COMPLIANCE CONSULTANCY ............................................................................... 11  
   1.5  ENVIRONMENTAL LEGAL REQUIREMENTS ........................................................................................... 12  
   1.6  TERMINOLOGIES APPLIED IN THIS REPORT ......................................................................................... 12  

2  METHODOLOGY AND APPROACH .................................................................................................................... 14  
   2.1  PURPOSE AND SCOPE OF THE ASSESSMENT ....................................................................................... 14  
   2.2  THE ASSESSMENT PROCESS AND METHODOLOGY .......................................................................... 14  
   2.3  SCREENING OF THE PROJECT .............................................................................................................. 16  
   2.4  SCOPING OF THE ENVIRONMENTAL ASSESSMENT ........................................................................... 16  
   2.5  BASELINE STUDIES ............................................................................................................................... 18  
   2.6  IMPACT PREDICTION AND EVALUATION ............................................................................................ 18  
   2.7  ESIA CONSULTATION ............................................................................................................................. 18  
   2.8  INTERESTED AND AFFECTED PARTIES ................................................................................................. 19  
   2.9  SITE NOTICES .......................................................................................................................................... 19  
   2.10 PUBLIC MEETING .................................................................................................................................... 19  
   2.11 NEWSPAPER ADVERTISEMENTS .......................................................................................................... 20  
   2.12 NON-TECHNICAL SUMMARY .............................................................................................................. 20  
   2.13 SUMMARY OF ISSUED RAISED ............................................................................................................ 20  
   2.14 DRAFT ESIA AND EMP ......................................................................................................................... 20  
   2.15 FINAL ESIA AND EMP ........................................................................................................................... 21  
   2.16 AUTHORITY ASSESSMENT AND DECISION MAKING ........................................................................... 21  
   2.17 MONITORING AND AUDITING .............................................................................................................. 21  

3  REGULATORY FRAMEWORK ............................................................................................................................... 22  
   3.1  NATIONAL LEGISLATION ....................................................................................................................... 22  
   3.2  NATIONAL REGULATORY REGIME ....................................................................................................... 25  
   3.3  PERMITS AND LICENCES ....................................................................................................................... 26  
   3.3.1 EXCLUSIVE PROSPECTING LICENCES ............................................................................................... 26  
   3.4  WORLD BANK STANDARDS .................................................................................................................. 26  

4  PROJECT DESCRIPTION ...................................................................................................................................... 28  
   4.1  NEED FOR THE PROJECT ........................................................................................................................ 28  
   4.2  EXPLORATION .......................................................................................................................................... 28  
   4.3  EXPLORATION METHODOLOGY ........................................................................................................... 28  
   4.4  ALTERNATIVES CONSIDERED ............................................................................................................... 29  
   4.5  NO-GO ALTERNATIVE ............................................................................................................................. 29  
   4.6  EQUIPMENT REQUIREMENTS ............................................................................................................... 30  
   4.7  POWER SUPPLY ....................................................................................................................................... 30  
   4.8  WATER SUPPLY ....................................................................................................................................... 30  
   4.9  WORKERS ACCOMMODATION ............................................................................................................... 30
5 BASELINE / CURRENT BIOPHYSICAL ENVIRONMENT ................................................................. 32
   5.1 CLIMATE .......................................................................................................................... 32
   5.2 GEOLOGY ......................................................................................................................... 32
   5.3 TOPOGRAPHY AND SOILS ............................................................................................. 34
   5.4 HYDROLOGY .................................................................................................................... 35
   5.5 VEGETATION ................................................................................................................... 36
   5.6 FAUNA SPECIES .............................................................................................................. 37
   5.7 SOCIO-ECONOMIC ENVIRONMENT ............................................................................. 37
      5.7.1 DEMOGRAPHY ........................................................................................................... 38
      5.7.2 GOVERNANCE ........................................................................................................... 38
      5.7.3 EMPLOYMENT ......................................................................................................... 38
      5.7.4 ECONOMY ................................................................................................................. 39
      5.7.5 HEALTH .................................................................................................................... 39
      5.7.6 HERITAGE ............................................................................................................... 40

6 IDENTIFICATION AND EVALUATION OF IMPACTS ................................................................ 41
   6.1 INTRODUCTION ............................................................................................................... 41
   6.2 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS .................................................. 43

7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MANAGEMENT MEASURES .... 45

8 ENVIRONMENTAL MANAGEMENT PLAN .............................................................................. 62

9 CONCLUSION ......................................................................................................................... 63

APPENDIX A - EMP ................................................................................................................. 65
APPENDIX B - NON-TECHNICAL SUMMARY ...................................................................... 66
APPENDIX C - EVIDENCE OF PUBLIC CONSULTATION ....................................................... 67
APPENDIX D - ECC CVS ....................................................................................................... 95
LIST OF TABLES

TABLE 1 - PROPOSED ACTIVITIES PLANNED PER PHASE .................................................................................. 28
TABLE 2 - LIMITS OF THE TAXONOMIC STUDY ............................................................................................ 25
TABLE 3 - NATIONAL POLICIES .......................................................................................................................... 26
TABLE 4 - NATIONAL POLICIES .......................................................................................................................... 26
TABLE 5 - LIST OF ACTIVITIES PLANNED PER PHASE .................................................................................. 28
TABLE 6 - IDENTIFICATION AND EVALUATION OF IMPACTS AND MITIGATION MEASURES ..................... 46
TABLE 7 - LOG OF ALL COMMENTS AND RESPONSES GENERATED THROUGHOUT PUBLIC CONSULTATION... 80

LIST OF FIGURES

FIGURE 1 - EPL 7536 LOCALITY MAP ............................................................................................................. 9
FIGURE 2 - ZOOMED-IN LOCALITY MAP OF EPL 7536 .................................................................................... 10
FIGURE 3 - ECC ESIA METHOD .......................................................................................................................... 15
FIGURE 4 - EPL 7536 OVERLAPPING SEVERAL FARMS .................................................................................. 19
FIGURE 5 - REGIONAL GEOLOGICAL SETTING OF EPL 7536 ......................................................................... 33
FIGURE 6 - ELEVATION PROFILE FOR EPL 7536 ............................................................................................ 34
FIGURE 7 - REGIONAL SOIL MAP OF EPL 7536 ............................................................................................... 35
FIGURE 8 - REGIONAL HYDROLOGY MAP OF EPL 7536 ................................................................................... 36
FIGURE 9 - REGIONAL VEGETATION MAP OF EPL 7536 ................................................................................... 37
FIGURE 10 - ECCS IMPACT PREDICTION AND EVALUATION PROCESS ......................................................... 42
## LIST OF ACCRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>ABBREVIATIONS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEM</td>
<td>Airborne electromagnetic</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune deficiency Syndrome</td>
</tr>
<tr>
<td>AMT</td>
<td>Audio Magneto telluric</td>
</tr>
<tr>
<td>COVID19</td>
<td>Corona Virus Disease 2019</td>
</tr>
<tr>
<td>DEA</td>
<td>Directorate of Environmental Affairs</td>
</tr>
<tr>
<td>ECC</td>
<td>Environmental Compliance Consultancy</td>
</tr>
<tr>
<td>EMA</td>
<td>Environmental Management Act</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>EPL</td>
<td>Exclusive Prospecting Licence</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>ESIA</td>
<td>Environmental and Social Impact Assessment</td>
</tr>
<tr>
<td>GSN</td>
<td>Geological Survey of Namibia</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>I&amp;AP</td>
<td>Interested &amp; Affected Parties</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>IHME</td>
<td>Institute for Health Metrics and Evaluation</td>
</tr>
<tr>
<td>MAWLR</td>
<td>Ministry of Agriculture, Water and land Reform</td>
</tr>
<tr>
<td>JV</td>
<td>Joint Venture</td>
</tr>
<tr>
<td>MEFT</td>
<td>Ministry of Environment, Forestry and Tourism</td>
</tr>
<tr>
<td>MME</td>
<td>Ministry of Mines and Energy</td>
</tr>
<tr>
<td>MPMRC</td>
<td>Minerals (Prospecting and Mining Rights) Committee</td>
</tr>
<tr>
<td>NDPS</td>
<td>National Development Plan five</td>
</tr>
<tr>
<td>NSA</td>
<td>National Statistics Agency</td>
</tr>
<tr>
<td>RAB</td>
<td>Rotary Air Blast</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

1.1 PROJECT OVERVIEW

EPL 7536 is located north of Gobabis in the Omaheke region. The necessary exploration work on the EPL will be operated by the Kuiseb Copper Company (Pty) Ltd under a Joint Venture (JV) agreement with Rio Tinto (Pty) Ltd.

The proposed project aims to undertake mineral exploration activities on said EPL for base and rare metals, precious metals, which are described in detail throughout the report. Please see the locality map below (Figure 1).

FIGURE 1 - EPL 7536 LOCALITY MAP

The following figure provides more detail about surrounding towns and access routes to EPL 7536.
Environmental Compliance Consultancy (ECC) has been engaged by the proponent, to undertake the ESIA and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, 2007 and its regulations.

The purpose of this report is to present the findings of the scoping study for the proposed project. This scoping report has been outlined in terms of the requirements of the Environmental Management Act, No. 7 of 2007 and its regulations, promulgated in 2012 (referred to herein as the EIA Regulations).

An environmental clearance application was submitted to the relevant competent authorities; the Ministry of Mines and Energy (MME) and Ministry of Environment, Forestry and Tourism (MEFT).

ECC has prepared this report. ECC’s terms of reference for the assessment is strictly to address potential effects, whether positive or negative and their relative significance, explore alternatives for technical recommendations and identify appropriate mitigation measures.

This report provides information to the public and stakeholders to aid in the decision-making process for the proposed project. The objectives are to:

- Provide a description of the proposed activity and the site on which the activity is to be undertaken, and the location of the activity on the site;
- Provide a description of the environment that may be affected by the activity;
- Identify the laws and guidelines that have been considered in the assessment and preparation of this report;
- Provide details of the public consultation process;
- Describe the need and desirability of the activity;
- Provide a high level of environmental and social impact assessment on feasible alternatives that were considered; and
- Report the assessment findings, identifying the significance of effects, including cumulative effects.

In addition to the environmental assessment, an EMP (Appendix A) is also required in terms of the Environmental Management Act, No. 7 of 2007. The attached EMP has been developed to provide a management framework for the planning and implementation of exploration activities. The EMP provides exploration standards and arrangements to ensure that the potential environmental and social impacts are mitigated, prevented and/or minimised as far as reasonably practicable, and that statutory requirements and other legal obligations are fulfilled.

1.3 THE PROPOONENT OF THE PROPOSED PROJECT

The details of the proponent are set out in Table 1 below.

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>POSTAL ADDRESS</th>
<th>EMAIL ADDRESS</th>
<th>TELEPHONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuiseb Copper Company (Pty) Ltd</td>
<td>P O Box 2055</td>
<td><a href="mailto:branko@iafrica.com.na">branko@iafrica.com.na</a></td>
<td>+264 81 124 6757</td>
</tr>
<tr>
<td>The Director</td>
<td>Swakopmund</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Namibia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.4 ENVIRONMENTAL COMPLIANCE CONSULTANCY

ECC, a Namibian consultancy (registration number Close Corporation 2013/11401), has prepared this scoping report and impact assessment on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa, in both the public and private sectors. ECC is independent of the proponent and has no vested or financial interest in the proposed project, except for fair remuneration for professional services rendered.

All compliance and regulatory requirements regarding this EIA report should be forwarded by email or posted to the following address:

**Environmental Compliance Consultancy**
PO BOX 91193 Klein Windhoek, Namibia
Tel: +264 81 669 7608
Email: info@eccenvironmental.com
1.5 ENVIRONMENTAL LEGAL REQUIREMENTS

The Environmental Management Act, No.7 of 2007 stipulates that an environmental clearance certificate is required to undertake listed activities in terms of the Act and its regulations. Listed activities triggered by the proposed project in terms of the Environmental Management Act, No. 7 of 2007 and its regulations are as follows:

MINING AND QUARRYING ACTIVITIES (with relevance here only to exploration activities)

- The construction of facilities for any process or activities which requires a licence, right or other forms of authorisation, and the renewal of a licence, right or other forms of authorisation, in terms of the Minerals (Prospecting and Mining Act), No. 33 of 1992.
  - The proposed project operates under a licence that permits for the construction of temporal exploration campsites, drill sites and access roads.
  - Furthermore, this listed activity, infers the provisions of the Minerals Act (Prospecting and Mining) Act 33 of 1992, under different licences as basis upon which certain activities qualify for an EIA. Part X of the Minerals Act (1992) defines prospecting/exploration activities under the lawful ownership of an exploration licence (EPL). An exploration licence excludes any mining activities, but includes activities strictly relating to exploration work. Hence the current project strictly focuses on exploration and not mining.
- Other forms of mining or extraction of any natural resources whether regulated by law or not
  - Soil and rocks will be sampled and explored for within the EPL 7528.
- Resource extraction, manipulation, conservation, and related activities
  - The proposed project will explore for base and rare metals, as well as precious metals.

WATER RESOURCE DEVELOPMENT

- The abstraction of ground or surface water for industrial or commercial purposes
  - Due to the drilling of exploration boreholes, the abstraction of groundwater is possible, although it is intended that water will be obtained from existing boreholes in the proposed project area. Any additional boreholes drilled for the intention of abstracting water for use on site should be permitted by the authorities in the form of an abstraction permit.

1.6 TERMINOLOGIES APPLIED IN THIS REPORT

This section provides definitions of key terms to enable the reader to form a technical understanding of the type of work associated with exploration programmes.

- REMOTE SENSING techniques in mineral exploration enable explorers to evaluate large areas of the earth remotely without having to undertake ground-based exploration operations. Remote sensing may be used to map the geology and structure that potentially localise the ore deposits, or may be used to identify rocks, which have been hydrothermally altered. Remote sensing involves the use of aircraft and satellite-based equipment to obtain the data to record spectral data from the surface of the earth. Remote sensing includes a number of tools and techniques including geographical information systems, radar and
sonar. Typically, satellites or a high-flying aircraft are used in the data collection process. It is a useful tool when searching for minerals and can give an indication of where deposits could be located. Remote sensing aids in narrowing down the field survey area and helps to identify target areas that may be considered for more.

- **AIRBORNE GEOPHYSICAL SURVEYS**, using magnetic, radiometric and electromagnetic techniques, are a key aspect in mineral exploration, enabling explorers to probe under ground, mapping geology and structure, including potentially direct identification of mineral deposits. Modern surveys are flown at a low level in a grid pattern, adhering fully to the safety margins prescribed by the Civil Aviation Authority (CAA) of Namibia.

- **GEOLOGICAL MAPPING** of outcrops is used to describe the primary lithology and morphology of rock bodies as well as age relationships between rock units. Mapping is a crucial part of refining subsurface targets, as it provides structural information and can be used to predict the subsurface geology. This will be conducted concurrently with the geochemical sampling.

- **GEOCHEMICAL SAMPLING** (soil and rock sampling) is a non-invasive technique to determine the existence and extent of mineralization and a potential resource. Geochemical data are used to focus on areas of higher mineral potential as the project advances and help to define drill targets. They assist the company to drill more selectively and thereby increase the chances of intersecting mineralised zones during exploration and reduce the overall footprint of exploration and environmental impact in the area. Geochemical surveys will be the first ground exploration method to be undertaken by the proponent in the licence area.
  - **SAMPLING** - Selecting a fractional but representative part of the soil or rock for analysis.

- **GROUND GEOPHYSICAL SURVEYS** including Magnetic, Induced Polarization (IP) and Electromagnetic (EM) techniques, may be undertaken, as appropriate, to collect data that give an indication of essential rock properties, particularly at depth. They are also used to map the geological structures. IP surveys involve sending electrical currents into the ground, measured via electrodes along linear cut-lines up to 3 km long to provide access to electrical cables. Small holes in the ground (0.2m x 0.2m x 0.3m) will be required for IP electrodes every 25 or 50m along a survey line. Copper sulphate solution will be used to improve the conduction of electrodes during the IP survey. The majority of EM techniques are completely non-invasive, and operate by sending electromagnetically induced currents into the ground. EM surveys are conducted along the same linear traverse lines. A variation is the Audio-Magneto Telluric (AMT) technique, in which surveys utilize the same lines and small holes in the ground, but without the application of high voltage electrical currents.

- **RAB DRILLING** (Rotary Air Blast drilling) is an open-hole technique that injects compressed air down the drill pipe and recovers the drill chip fragments, on the outside of the drill stem.

- **DIAMOND DRILLING** entails the use of a diamond-studded drill in order to obtain core samples of two cm or more in diameter. Bio-degradable drill additives will be used during diamond core drilling. Soil, rock and drill core samples will be temporarily stored at the site office. Exploration activities are usually undertaken in phases, with periods of no field activity between them, whilst awaiting analytical results, and the integration and interpretation of data to decide on the next phase of exploration.
2 METHODOLOGY AND APPROACH

2.1 PURPOSE AND SCOPE OF THE ASSESSMENT

The aim of this assessment is to determine which impacts are likely to be significant (the main focus of the assessment); scope the available data and any gaps which need to be filled; determine the spatial and temporal scope; and identify the assessment methodology.

Subsequently, scoping of the ESIA was undertaken by the ESIA team. The scope of the assessment was determined through undertaking a preliminary assessment of the proposed project against the receiving environment obtained through a desk-top review, available site-specific literature, monitoring data and site reports.

ECC’s terms of reference for the assessment is strictly to address potential effects, whether positive or negative and their relative significance, explore alternatives for technical recommendations and identify appropriate mitigation measures.

2.2 THE ASSESSMENT PROCESS AND METHODOLOGY

The EIA methodology applied to this EIA has been developed using the International Finance Corporation (IFC) standards and models, in particular Performance Standard 1, ‘Assessment and management of environmental and social risks and impacts’ (International Finance Corporation, 2017) (International Finance Corporation, 2012), which establishes the importance of:

- Integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects;
- Effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and
- The client’s management of environmental and social performance throughout the life of the project.

Furthermore, the Namibian Draft Procedures and Guidance for ESIA and EMP (Republic of Namibia, 2008) as well as the international and national best practice; and over 25 years of combined EIA experience, were also drawn upon in the assessment process.

This impact assessment is a formal process in which the potential effects of the project on the biophysical, social and economic environments are identified, assessed and reported, so that the significance of potential impacts can be taken into account when considering whether to grant approval, consent or support for the proposed project.
FIGURE 3 - ECC ESIA METHOD
2.3 **SCREENING OF THE PROJECT**

The first stages in the EIA process are to register the project with the DEA / MEFT and undertake a screening exercise to determine whether it is considered as a listed activity under the Environmental Management Act, No. 7 of 2007 and associated regulations and if significant impacts may arise from the project. The location, scale and duration of project activities will be considered against the receiving environment.

It was concluded that an ESIA (e.g. scoping report and EMP) is required, as the proposed project is considered as a listed activity and there may be potential for significant impacts to occur.

2.4 **SCOPING OF THE ENVIRONMENTAL ASSESSMENT**

Where an ESIA is required, the second stage is to scope the assessment. The main aims of this stage are to determine which impacts are likely to be significant (the main focus of the assessment); scope the available data and any gaps which need to be filled; determine the spatial and temporal scope; and identify the assessment methodology.

The screening phase of the project is a preliminary analysis to determine ways which the project may interact with the biophysical, social and economic environment. Impacts that are identified as potentially significant during the screening and scoping phases are taken forward for further assessment in the ESIA process. The details and outcome of the screening process are discussed further in sections 6 and 7.

Subsequently, scoping of the ESIA was undertaken by the EIA team. The scope of the assessment was determined through undertaking a preliminary assessment of the proposed project against the receiving environment obtained through a high-level desktop review. Feedback from consultation with the client and stakeholders also informed this process.

The following environmental and social topics and subtopics were scoped into the assessment, as there was potential for significant impacts to occur:

**SOCIO-ECONOMIC ENVIRONMENT**
- Limited goods and services procurement within the local economy.

**BIOPHYSICAL ENVIRONMENT**
- Dust emissions
- Soil and geology
- Terrestrial ecology
- Terrestrial biodiversity (including fauna and flora)
- Groundwater (potential cumulative impact). Water management suggestions are contained in the EMP (Appendix A).
The following topic was scoped out of the EIA, as no likely significant impacts are predicted as the proposed project poses little to no change from the current baseline, therefore is not discussed further in this report.

- Heritage: A desktop review of the general EPL area has not revealed any site of interest with a heritage connotation to it. The EMP does however contain a Standard Operating Procedure (SOP) called a “chance-find” procedure to be utilised in the unlikely event of a possible archaeological find.
2.5 Baseline Studies

Baseline studies are undertaken as part of the scoping stage, which involves collecting all pertinent information from the current status of the receiving environment. This provides a baseline against which changes that occur as a result of the proposed project can be measured.

For the proposed project, baseline information was obtained through a desktop study, focussing on environmental receptors that could be affected by the proposed project, verified through site-specific information. The baseline information is covered in Section 5.

A robust baseline is required in order to provide a reference point against which any future changes associated with a project can be assessed, and it allows for suitable mitigation and monitoring actions to be identified.

The existing environment and social baseline for the proposed project were collected through various methods:
- Desktop studies;
- Consultation with stakeholders; and
- Engagement with Interested and Affected Parties (I&APs). See Appendix C.

2.6 Impact Prediction and Evaluation

Impact prediction and evaluation involves predicting the possible changes to the environment as a result of the development/project. The recognized methodology was applied to determine the magnitude of impact and whether or not the impact was considered significant and thus warrant further investigation. The impact prediction and evaluation methodology used is presented in Section 6 of this report. The findings of the assessment are presented in Section 7.

2.7 ESIA Consultation

Public participation and consultation are requirements stipulated in Section 21 of the Environmental Management Act, No. 7 of 2007 and associated regulations for a project that needs an environmental clearance certificate. Consultation is a compulsory and critical component in the ESIA process in achieving transparent decision-making and can provide many benefits.

The objectives of the stakeholder engagement process are to:
- Provide information on the project to I&APs: introduce the overall concept and plan;
- Clarify responsibility and regulating authorities;
- Listen to and understand community issues, concerns and questions;
- Explain the process of the ESIA and timeframes involved; and
- Establish a platform for ongoing consultation.
2.8 INTERESTED AND AFFECTED PARTIES

EPL 7536 overlaps with several farms and 2 District roads, the C20 and the C22, which run from north to south through the EPL (See figure 4). The two roads provide access to the farms that overlap with and border the EPL.

All owners of the farms that overlap or border EPL 7536 were identified as I&APs, as well as the relevant authoritative bodies. Other I&APs will be identified through invitations such as the newspaper advertisements and site notices.

2.9 SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of a proposed project. A site notice was set up at the B6 and C22 intersection as well as at the entrance to the Agra retail store in Gobabis. Copies of the site notices is illustrated in Appendix C.

2.10 PUBLIC MEETING

In terms of Section 22 of the Environmental Management Act, No. 7 of 2007 and its regulations, for the purpose of registering I&APs, no public meeting was held during the public consultation period, as it was not deemed necessary for this project. Moreover, a meeting with the Namibia Agricultural Union was held on the 22 October 2020 to introduce the project and decide on the best means of communication with the affected farm owners. See appendix C.2 for the record of meeting held.
2.11 NEWSPAPER ADVERTISEMENTS

Notices regarding the proposed project and associated activities were circulated in three newspapers namely the ‘Republikein’, Allgemeine Zeitung’ and the ‘Sun’ on the 21st and 28th of September 2020. The purpose of this was to commence the consultation process and enable I&APs to register an interest with the project. The adverts can be found in Appendix C.1.

2.12 NON-TECHNICAL SUMMARY

The Non-Technical Summary (NTS) presents a high-level description of the proposed project; sets out the ESIA process and when and how consultation is undertaken; and provides contact details for further project-specific inquiries to all registered I&APs. The NTS was distributed to all registered I&APs and the NTS can be found in Appendix B.

2.13 SUMMARY OF ISSUES RAISED

The initial public participation phase involved the notifications of the project through media such as the newspaper adverts, direct mail sent to identified I&APs and the display of site notices delivered very few interactive communications from the public. The full log of comments received from this phase are contained in appendix C.3.

The main concerns received from the I&APs during public consultation are summarized below.

- The placement of a site notice was disputed by the I&APs citing ineffective reach.
  - Four additional site notices were also placed in other strategic locations in Gobabis and on the intersection leading to Witvlei and on the district road leading to Leonardville.
- Information on the proponent - Kuiseb Copper Company (Pty) Ltd;
- The nature of the exploration activities proposed;
- Water supply for exploration activities; and
- Clarity on the potential impacts of exploration on the biodiversity of the area.

2.14 DRAFT ESIA AND EMP

This report and EMP for the project’s environmental clearance includes an assessment of the biophysical and social environment, which satisfies the requirements of Step 5 (Figure 3).

The ESIA report documents the findings of the assessment process, provides stakeholders with the opportunity to comment as part of continued consultation and forms part of the environmental clearance application. The EMP provides measures to manage the environmental and social impacts of the proposed project and outlines specific roles and responsibilities to fulfil the plan.
This ESIA report focuses on the significant impacts that may arise from the proposed project as described in Step 4 (Figure 3). These impacts are discussed in Chapter 6.

This ESIA draft report was open to stakeholders and I&APs for consultation for a period of 7 days (11/11/2020 – 18/11/2020), meeting the mandatory requirement of 7 days as set out in the Environmental Management Act, No. & of 2007 and its regulations, including the Environmental Impact Assessment Regulations, No. 30 of 2012.

The aim of this stage was to ensure all stakeholders and I&APs have the opportunity to provide final comments on the assessment process and findings and register their concerns. However, only one I&AP responded to the call for review of the draft assessment documentation. Please see table 2.

2.15 **FINAL ESIA AND EMP**

The final ESIA report and associated appendices are available to all stakeholders on the ECC website www.eccenvironmental.com. All I&APs will be informed via email.

The ESIA report and appendices were formally submitted to the Office of the Environmental Commissioner, DEA as part of the application to for an environmental clearance certificate.

2.16 **AUTHORITY ASSESSMENT AND DECISION MAKING**

The Environmental Commissioner in consultation with other relevant authorities will assess if the findings of the ESIA presented in the ESIA report is acceptable. If deemed acceptable, the Environmental Commissioner will revert to the proponent with a record of decision and any recommendations.

2.17 **MONITORING AND AUDITING**

In addition to the EMP being implemented by the proponent, a monitoring strategy and audit procedure will be determined by the proponent and competent authority. This will ensure key environmental receptors are monitored over time to establish any significant changes from the baseline environmental conditions caused by project activities.
3 REGULATORY FRAMEWORK

This chapter outlines the regulatory framework applicable to the proposed project. Table 3 provides a list of applicable legislation and the relevance to the project. An environmental clearance is required for any activity listed as per Government Notice No 29 of 2012 of the EMA.

3.1 NATIONAL LEGISLATION

<table>
<thead>
<tr>
<th>NATIONAL REGULATORY REGIME</th>
<th>SUMMARY</th>
<th>APPLICABILITY TO THE PROJECT</th>
</tr>
</thead>
</table>
| Constitution of the Republic of Namibia of 1990 | The Constitution of the Republic of Namibia, 1990 clearly defines the country’s position in relation to sustainable development and environmental management. The constitution refers that the state shall actively promote and maintain the welfare of the people by adopting policies aimed at the following:

“Maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present, and future; in particular, the government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory.” | The proponent is committed to engage the local community for the proposed project by providing local jobs as well as, exploring ways of finding rich resources to contribute to the mining sector in Namibia. |

| Minerals (Prospecting and Mining) Act, No. 33 of 1992 | Provides for the reconnaissance, prospecting and mining for, and disposal of, and the exercise of control, minerals in Namibia. Section 50 (i) requires “an environmental impact assessment indicating the extent of any pollution of the environment before any prospecting operations or mining operations are being carried out and an estimate of any pollution, if any, likely to be caused by such prospecting operations or mining operations” Section 50 sets out that in addition to any term and condition contained in a mineral agreement and any term and condition contained in any mineral licence, it shall be a term and condition of any mineral licence that the holder of such mineral licence shall:

Exercise any right granted to him or her in terms of the provisions of this Act reasonably and in such manner that the rights and interests of the owner of any land to which such licence relates are not adversely affected, except to the extent to which such owner is compensated.

Section 52 sets out that the holder of a mineral licence shall not exercise any rights conferred upon such | The proposed activity is prospecting for minerals; hence it requires an EIA to be carried out as it triggers listed activities in the Environmental Management Act and its regulations. This report presents the findings of the EIA.

Works shall not commence until all conditions in the Act are met, which includes an agreement with the landowners and conditions of compensation have been agreed.

The project shall be compliant with Section 76. With regards to records, maps, plans and financial statements, information, reports, and returns submitted.

As the proponent will need to access privately owned land the proponent
NATIONAL REGULATORY REGIME | SUMMARY | APPLICABILITY TO THE PROJECT
---|---|---
**Environmental Management Act, (No. 7 of 2007) and its regulations, including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2012)**
- The Act aims to promote sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment.
- It sets the principles of environmental management as well as the functions and powers of the minister. The Act requires certain activities to obtain an environmental clearance certificate prior to project development. The Act states an EIA may be undertaken and submitted as part of the environmental clearance certificate application.
- The MEFT is responsible for the protection and management of Namibia’s natural environment. The Department of Environmental Affairs under the MEFT is responsible for the administration of the EIA process.
- This environmental scoping report (and EMP) documents the findings of the environmental assessment undertaken for the proposed project, which will form part of the environmental clearance application.
- The assessment and report have been undertaken in line with the requirements under the Act and associated regulations.

**Water Act, No. 54 of 1956**
- Although the Water Resources Management Act, No 11 of 2013 has been billed, but not promulgated, it cannot be enacted as the regulations have not been passed – so the Water Act 54 of 1956 is still in effect. This act provides for “the control, conservation and use of water for domestic, agricultural, urban and industrial purposes; to make provision for the control, in certain respect and for the control of certain activities on or in water in certain areas”.
- The Department of Water Affairs within the Ministry of Agriculture Water and Land Reform (MAWLR) is responsible for the administration of the act.
- The minister may issue a permit in terms of the regulations 5 and 9 of the government notice R1278 of 23 July 1971 as promulgated under section 30 (2) of the Water Act no. 54 of 1956, as amended.
- The Act stipulates obligations to prevent pollution of water. Should wastewater be discharged, a permit is required. The EMP sets out measures to avoid polluting the water environment.
- Measures to minimise potential groundwater and surface water pollution are contained in the EMP.
- Abstraction of water from boreholes requires an abstraction permit. Abstraction rates need to be measured and reported to the authorities in accordance with the requirements of this legislation. In addition, annual reporting on the environmental impacts of water abstraction is recommendable. Should...
<table>
<thead>
<tr>
<th>NATIONAL REGULATORY REGIME</th>
<th>SUMMARY</th>
<th>APPLICABILITY TO THE PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>the project require drilling and abstraction of water from underground sources, an application should be submitted to the authorities.</td>
</tr>
<tr>
<td>Soil Conservation Act, No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38 of 1971</td>
<td>Makes provision for the prevention and control of soil erosion and the protection, improvement and the conservation, improvement and manner of use of the soil and vegetation.</td>
<td>This will be taken into consideration during the intention of the works to be undertaken within EPL 7536 site. Measures in the EMP set out methods to avoid soil erosion.</td>
</tr>
<tr>
<td>The Forestry Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005</td>
<td>Section 22 requires a permit for the cutting, destruction or removal of vegetation that are classified under rare and or protected species; clearing the vegetation on more than 15 hectares on any piece of land or several pieces of land situated in the same locality which has predominantly woody vegetation; or cut or remove more than 500 cubic metres of forest produce from any piece of land in a period of one year.</td>
<td>The planned project activities will include minimal vegetation clearing to support exploration activities. The necessary permit should be obtained from the MEFT, where the application should satisfy that the cutting and removal of vegetation will not interfere with the conservation of soil, water or forest resources.</td>
</tr>
<tr>
<td>National Heritage Act, No. 27 of 2004.</td>
<td>The Act provides provision of the protection and conservation of places and objects with heritage significance. Section 55 stipulates that exploration companies must report any archaeological findings to the National Heritage Council after which a heritage permit needs to be issued</td>
<td>There might be potential for heritage objects to be found on site, therefore the stipulations in the Act have been taken into consideration and are incorporated into the EMP. Section 55 compels exploration companies to report any archaeological findings to the National Heritage Council after which a permit needs to be issued before the find can be disturbed. In cases where heritage sites are discovered the ‘chance find procedure’ will be used</td>
</tr>
</tbody>
</table>
### 3.2 National Regulatory Regime

#### Table 3 - National Policies

<table>
<thead>
<tr>
<th>National Regulatory Regime</th>
<th>Summary</th>
<th>Applicability to the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision 2030</td>
<td>Vision 2030 sets out the nation’s development programmes and strategies to achieve its national objectives. It sets out eight themes to realise the country’s long-term vision. Vision 2030 states that the overall goal is to improve the quality of life of the Namibian people to a level in line with the developed world.</td>
<td>The planned project shall meet the objectives of Vision 2030 and shall contribute to the overall development of the country through continued employment opportunities.</td>
</tr>
<tr>
<td>The Fifth National Development Plan (NDP5)</td>
<td>NDP5 is the fifth in the series of seven five-year national development plans that outline the objectives and aspiration of Namibia’s long-term vision as expressed in Vision 2030. NDP5 is structured on the pillars of economic progression, social transformation, environmental sustainability and good governance. Under the social transformation pillar is the goal of improved education.</td>
<td>The planned project supports meeting the objectives of NDP5 by creating opportunities for employment to the nearby community and the Namibian nation.</td>
</tr>
<tr>
<td>Minerals Policy</td>
<td>The Minerals Policy was adopted in 2002 and sets guiding principles and direction for the development of the Namibian mining sector while communicating the values of the Namibian people. It sets out to achieve several objectives in line with the sustainable development of Namibia’s natural resources. The policy strives to create an enabling environment for local and foreign investments in the mining sector and seeks to maximise the benefits for the Namibian people from the mining sector while encouraging local participation, amongst others. The objectives of the Minerals Policy are in line with the objectives of the Fifth National Development Plan that include reduction of poverty, employment creation and economic empowerment in Namibia.</td>
<td>The objectives of the Minerals Policy are in line with the objectives of the NDP5, i.e. reduction of poverty, employment creation, and economic empowerment in Namibia. The proposed project conforms to the policy, which has been considered through the EIA process and the production of this report.</td>
</tr>
<tr>
<td>Labour Act, No. 11 of 2007</td>
<td>The Labour Act, No. 11 of 2007 (Regulations relating to the Occupational Health &amp; Safety provisions of Employees at Work promulgated in terms of Section 101 of the Labour Act, No. 6 of 1992 - GN156, GG 1617 of 1 August 1997)</td>
<td>The proposed project will comply with stringent health and safety policies, including the compulsory use of specific PPE in designated areas to ensure adequate protection against health and safety risks. Proper storage and labelling of hazardous substances are required. The project will ensure employees in charge of and working with hazardous substances need to be</td>
</tr>
</tbody>
</table>
3.3 PERMITS AND LICENCES

3.3.1 EXCLUSIVE PROSPECTING LICENCES

The EPL 7536 was granted on the 25th of October 2019 and expires on the 24th of October 2022. In terms of the Minerals (Prospecting and Mining) Act, No. 33 of 1992, an EPL may be renewed, however, it may only be extended twice for two-year periods if demonstrable progress is shown. Renewals beyond seven years require special approvals from the Minister (MME, 2018).

Such renewals are subject to a reduction in the size of the EPL. When a company applies for renewal of an EPL, the application must be lodged 90 days prior to the expiry date of the EPL or, with good reason, no later than the expiry date (MET & MME, 2018).

If renewal is applied for, the MME must review the renewal application and make any comments and/or recommendations for consideration by the Minerals (Prospecting and Mining Rights) Committee (MPMRC). Amendments and revisions may be required for the EIA and EMP. Due consideration must be given when renewing the licence to ascertain whether there is justification to renew the licence. Once an EPL expires and a new EPL is issued, even if it is to the previous holder, the full screening process must be followed with a full EIA process, before operations may commence (MET & MME, 2018).

The permits and licence that may be relevant to the proposed projects are outlined in Table 5.

TABLE 4 - NATIONAL POLICIES

<table>
<thead>
<tr>
<th>PERMIT AND LICENCES</th>
<th>RELEVANT AUTHORITY</th>
<th>VALIDITY/DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER ABSTRACTION PERMITS</td>
<td>Ministry of Agriculture, Water and Land Reform</td>
<td>Permit dependent</td>
</tr>
<tr>
<td>EXCLUSIVE PROSPECTING LICENCE</td>
<td>Ministry of Mines and Energy - Windhoek</td>
<td>3 years</td>
</tr>
<tr>
<td>NOTICE OF INTENTION TO DRILL</td>
<td>Ministry of Mines and Energy - Windhoek</td>
<td>To be submitted prior to drilling</td>
</tr>
</tbody>
</table>

3.4 WORLD BANK STANDARDS

The International Finance Corporation (IFC) is a member of the World Bank Group and is the largest global development institution focusing on the private sector in developing countries. Its standards have become a global benchmark for environmental and social performance. They form the basis for the Equator Principles (IFC, 2013), a voluntary environmental and social risk-management framework used by 77 financial institutions worldwide. The Equator Principles are a framework and
set of guidelines for evaluating social and environmental risks in project finance activities and apply to all new projects with a total capital cost of US$10 million or more, no matter what industry sectors, without geographic requirement. The Equator Principles are not applicable to this specific project.
4 PROJECT DESCRIPTION

4.1 NEED FOR THE PROJECT

Namibia is relatively rich in a variety of minerals, and mining has always been a critical sector of the Namibian economy. The sector contributes significantly to the country’s Gross Domestic Product (GDP), through taxation, royalties, fees and equities as well as export revenues. For this reason, exploration activities are encouraged in Namibia and the vision of the Minerals Policy being to “further attract investment and enable the private sector to take the lead in exploration, mining, mineral beneficiation and marketing” supports the development.

The proposed project is in line with this vision and has the potential to create short term and limited employment and to contribute to the national income. In the event that exploration activities are successful, and a resource with commercially viable mineral concentrations can be defined, the exploration operations can potentially transcend into mining operations which can result in multiple socio-economic benefits to the region and the country at large.

4.2 EXPLORATION

It is the process of sampling/collectiong fragments of the earth’s layers for testing of each sample’s mineral composition, grade, and spatial dispersion to acquire an informed perspective of the target area’s ore potential. Deeper probing is achieved through geophysical surveys.

4.3 EXPLORATION METHODOLOGY

Exploration work will be entirely conducted by contracted geological, geophysical consultants and in phase three and four onwards drilling consultants and companies. The below schedule of activities (Table 6) is presented for the project.

<p>| TABLE 5 - LIST OF ACTIVITIES PLANNED PER PHASE |</p>
<table>
<thead>
<tr>
<th>PHASE</th>
<th>DATE</th>
<th>ACTIVITY DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: 2020</td>
<td>Field inspection commencement date unknown, desktop work commenced 2019:</td>
<td>Exploration activities involve desktop interpretation of available airborne magnetic, radiometric and electromagnetic data, mapping, analysis satellite imagery and archival data from the GSN. Additionally, preliminary field inspection of onsite geology and possibly initial stream sediment sampling may take place.</td>
</tr>
<tr>
<td>Phase 2: 2021</td>
<td>Actual commencement date unknown: Early January 2021.</td>
<td>Airborne electromagnetic (AEM) survey, as above (January 2021), and interpretation of this data, coupled with the commencement of soil sampling and geological mapping in specific target localities, to be determined by the above desktop interpretation and AEM results.</td>
</tr>
<tr>
<td>Phase 3: 2021</td>
<td>Actual commencement date unknown</td>
<td>RAB and/or Aircore drilling in select areas only (locations unknown), depending on results from the first two phases.</td>
</tr>
<tr>
<td>Phase 4:</td>
<td>Actual</td>
<td>Desktop reviews of all data and subsequent planning activities, which may</td>
</tr>
</tbody>
</table>
4.4 **ALTERNATIVES CONSIDERED**

The proposed project has been subject to a process of design evolution, informed by both consultation and an iterative environmental assessment. In terms of the Environmental Management Act, No. 7 of 2007 and its regulations, alternatives considered should be analysed and presented in the scoping assessment and EIA report. This requirement ensures that during the design evolution and decision-making process, potential environmental impacts, costs, and technical feasibility have been considered, which leads to the best option(s) being identified.

Exploration activities range from extremely low impact exploration such as coarse line sampling and geophysical surveying to more invasive activities such as extensive close spaced drilling. The initial exploration results will define the need, if at all, of the more invasive activities.

At this stage of the project greenfield exploration activities for Copper/Silver in the 'Kalahari Copper Belt' will be undertaken, being sufficient for delineating target stratigraphy and potential ore bodies. The following activities are ongoing or proposed:

- Desktop analysis of all Open File historical reports and data housed at the MME (ongoing)
- Interpretation of Govt aeromagnetic and radiometric data (ongoing);
- Satellite image interpretation (ongoing);
- Acquisition of low-level airborne electromagnetic data (coarse line spacing yet to be determined, planned);
- Initial field visits to exposed geology both in isolated outcrop and in streams (planned);
- Stream sediment and rock-chip sampling for geochemistry (planned); and
- Detailed geochemical sampling and ground geophysical follow-up of specific interpreted target localities (planned).

Once the exploration programme is further defined with new information generated from the initial geophysical surveying and data analysis activities, the following more invasive techniques will be employed at strategic locations informed by new data.

- RAB and/or Aircore drilling as the next stage of the programme, followed by
- Diamond core drilling.

The most suitable options and methods shall be identified to ensure the impacts on the environment and society from these activities are minimised.

4.5 **NO-GO ALTERNATIVE**

Should exploration activities within EPL 7536 not take place, the anticipated environmental impacts from exploration activities would not occur, however, the social and economic benefits associated with project would also not be materialized.

There would not be an opportunity to define resources within the project area, this would be a missed opportunity for geological mapping and data collection that would add to regional
knowledge of Namibia’s mineral wealth and, if found to be viable for mining, could benefit the Namibian economy.

4.6 EQUIPMENT REQUIREMENTS

In the early exploration phase (1st and 2nd year) contractor vehicles and equipment will comprise:

- 4x4 vehicles for personnel and field equipment;
- Field equipment including tents, mobile toilets and ablution facilities, spades, axes, soil sampling equipment such as sieves, sample bags, surveying apparatus;
- Portable or semi-portable geophysical equipment such as magnetometers, electromagnetic or Induced Polarization apparatus (all passive and non-invasive).
- In the ensuing phases (2nd and 3rd year) drilling is envisioned. The equipment requirements would therefore be an RAB/ Aircore Drill rig initially then followed by diamond core drilling. This is anticipated to be a specific provision within tender documentation.

4.7 POWER SUPPLY

The individual contractors will be responsible to supply their own energy needs throughout the duration of their stay within the field camps. The proponent prefers the use of solar panels and small-scale generators.

4.8 WATER SUPPLY

Water demand per day for the exploration project is broken down into two usage categories. These are:

- Water for domestic use within field camps: 5m³ per day; and
- Water for exploration activities (drilling): 20m³.

Water can be sourced from two sources. These are:

SOURCE 1: Supplied by local authorities in the area i.e. Witvlei or Gobabis
Requirement: Completed water supply form submitted to the local authority.

SOURCE 2: Supplied directly from farmer’s boreholes with their permission. Alternatively, if a demand for water arises and where many holes are to be drilled in an area, then a borehole may be drilled. In this case the required water borehole permits, and abstraction permit shall be obtained from the MAWLR.

4.9 WORKERS ACCOMMODATION

Three to ten possible job opportunities are foreseen during the exploration phase and workers will be sourced from the local town (Gobabis) and surrounding villages. The workers will be deployed at various stages of exploration including soil sampling, geological mapping, geophysical surveys and drilling operations.
It is envisaged that for most of the exploration programme workers will reside in Gobabis and be transported to and from the site. The proponent will provide transport. However, during the latter part of the prospecting (drilling) workers may be required to stay in field camps away from any farmhouses. It is anticipated that the contractor will be completely self-sufficient with regard to power supply and waste management.

The proponent shall provide suitable living facilities during this period. Furthermore, the camping equipment shall include tents and a portable kitchen.

4.10 Waste Management

Solid and effluent waste will be generated by the project, whilst exploration work throughout the phases are ongoing. Waste produced on site will include sewerage and solid waste such as packaging. Wastewater (e.g. water with drill additives) used during drilling will be recycled where possible, and effluent contained and allowed to evaporate after use. The drill-sludge will be disposed of at the Gobabis municipal waste disposal site. In case of the provision of mobile toilets to be used on site, sewerage generated shall be managed by the toilet contractor. The proponent shall ensure waste transport certificates are provided by the toilet contractor for sewerage waste removed from site. No toxic waste will be discharged into the environment.

4.11 Wastewater Effluent

Wastewater will be diverted into a lined sump to evaporate. The remaining solid residue will be buried in the soil if not toxic. Hazardous waste (hydrocarbon contaminated soil, etc.) will be disposed of at a municipal landfill site.

4.12 Rehabilitation

Once exploration activities are completed the areas shall be rehabilitated to a condition as close to the original state as far as possible. Rehabilitation shall be determined during the exploration programme and shall be agreed with the landowners and authorities as implied by legislation (discussed in Section 3). Before and after photographs will be used to monitor rehabilitation success.
5 BASELINE / CURRENT BIOPHYSICAL ENVIRONMENT

This section provides an overview of the existing biophysical environment through the analysis of the baseline data regarding the existing natural and socio-economic environment. Desktop studies on the national database are undertaken to get information of the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed project can be measured.

5.1 CLIMATE

EPL 7536 is located in a part of Namibia which receives between 350 and 400 mm of rain per year, with a variation coefficient of 30 - 40%. Rainfall events are limited to the summer months, mainly between December and March, in the form of thunderstorms often associated with heavy downpours. Potential evaporation is between 1,820 and 1,960 mm per year, meaning an average water deficit of between 1,700 and 1,900 mm per year. Relative humidity is low, rarely more than 20% in winter but may reach 85% in summer before or after thunderstorm build-up. Maximum temperatures average around 32 - 34°C, mainly recorded during the afternoons between November and January, while minimum temperatures are around 2 - 4°C and are normally recorded during nights in June and July. Deviations from these averages are common, with the highest temperatures reaching 38 - 40°C and the lowest temperatures below 0°C. Frost during the winter months is common (Mendelsohn et al., 2002).

Over the interior the Kalahari High dominates during winter and the subsiding air causes cloudless days with stable sinking air. During summer the positions of the high-pressure cells fluctuate more, allowing low pressure cells to develop over the heated interior, which in turn pull moist air from the inter-tropical convergence zone. As the moist air from the north and the east moves south and west, the northeast parts of Namibia receive the most rain – diminishing in a direction to the south and west.

Due to the rhythm of the air pressure systems, the wind patterns over the interior remain fairly predictable. Prevailing wind over EPL 7536 is expected to be from the east and northeast, with occasional airflow from the southeast and southwest. Wind speed is expected to be low with more than two-thirds of the time lower than 2 m/s. The stronger air movements during the afternoons and evenings are the result of the ground being heated more in some places than others. During the winter months wind speed is slightly higher (Mendelsohn, et al., 2002).

5.2 GEOLOGY

Namibia can be divided into two broad geological provinces, one covering the western parts and the other in the east. The western parts consist of a variety of geological formations of different ages and composition and formed under very diverse environmental conditions – some were formed in the depths of primeval oceans, others as a result of the movement of the earth’s crust or because of collisions or volcanic eruptions. Most of these formations are exposed in the west as rugged landscapes of mountains, hills, valleys and plains with sparse vegetation, providing an interesting insight into Namibia’s geological past. In eastern Namibia, the formations are covered with deposits of a much more recent past (Mendelsohn et al., 2002). The deposits are loose, aeolian of origin,
sandy and unconsolidated. On the surface the east of Namibia appears monotonous and uniform, covered with dense vegetation in the north and decreasing to the south. Most of the knowledge about these sediments has been derived from water abstraction boreholes, and rare outcrops and underlying formations exposed along drainage lines and around isolated pans.

Formations of the Damara Supergroup, between 850 and 600 million years old, cover a large part of the central and western parts of Namibia north of the Tropic of Capricorn. South of the Damara Supergroup is the Namaqua Metamorphic Complex (between 1,400 and 1,050 million years old), the Nama Group (538 – 547 million years old) and the Karoo Supergroup (300 – 180 million years old). To the east the much younger Kalahari deposits (<70 million years old) dominate, overlaying most of the older formations (Mendelsohn et al., 2002). The EPL falls within the geological bounds of the Kalahari copper belt and therefore is regarded as an area of high interest for copper exploration.

The different geological group formations associated with the EPL are illustrated in Figure 5.
5.3 **TOPOGRAPHY AND SOILS**

The topography of the EPL is flat, varying between 1,536 and 1,253 m above mean sea level. Except for limited outcrops comprising the Witvlei- and Kuibis-formations within EPL 7536, the surface Quaternary cover appears to be uniform, and the entire landscape has a gentle gradient dipping towards the west and east (Figure 6). The general landscape of the EPL is flat, as the Kalahari landscape dominates. Linear dunes become also more prominent towards the south, generally oriented in a W-E direction. These dunes are permanent, fossil features and do not migrate like dunes of the Namib Desert. The dunes are also stabilized by permanent vegetation.

**FIGURE 6 - ELEVATION PROFILE FOR EPL 7536**

Towards the west of EPL 7536 eutric regosols are common (Figure 6). These soils are medium to fine-textured, typically associated with weathered landscapes. Although reasonably fertile, these soils form thin layers (not exceeding 50 cm) lying directly above the rock surfaces from which they originated. Regosols are susceptible to water erosion, especially where there is any degree of slope (Mendelsohn, et al., 2002).

Ferralic arenosols dominate the Kalahari landscape and covers the whole EPL (Figure 7). These soils derived from wind-blown (aeolian) processes and usually extend to depths of several metres. Arenosols drain rapidly, due to a sand component of more than 70%. The high contents of combined oxides of iron aluminium (sesquioxides) give arenosols its typical reddish colour, and a fertility based on these minerals. However, due to its high porosity, the lack of organic matter and its inability to retain nutrients the cultivation potential of arenosols are limited. Where the Kalahari dunes are
more pronounced, arenosols are sorted as finer material on the dunes and coarser material on the areas between the dunes.

Eutric fluvisols are associated with the ephemeral drainage lines of the Kalahari. These soils were intensely reworked during its formation, as a result of flooding. As the Kalahari landscape became more desiccated, the fluvisols became more stagnant and lost much of the original organic material and nutrients, meaning that it has lost a substantial degree of its original fertility.

FIGURE 7 - REGIONAL SOIL MAP OF EPL 7536

5.4 HYDROLOGY

The EPL is located within the drainage basin of the Black Nossob River. The river originates on the eastern parts of the Khomas Hochland in central Namibia, and is ephemeral, i.e. it only contains water for brief periods shortly after sufficient run-off is received in the headwaters as a result of downpours. The Black Nossob confluences with the White Nossob to its west to form the Nossob River, which eventually forms the border between Botswana and South Africa after it leaves Namibian territory. Surface water flow is confined to the harder surfaces and the few dry drainage lines, which are tributaries of the Black Nossob River. No runoff occurs on the sandy surface of the Kalahari.

EPL 7536 is located in the South-eastern Kalahari Groundwater Basin only (Figure 8). The general direction of the groundwater flow is southwest over the western half and east over the northeast.
This basin shows a generally moderate potential of groundwater with an increased potential to the north (Christelis and Struckmeier, 2001). Farms located within and nearby EPL 7536 obtain water from borehole abstraction. Recorded boreholes of relevance to EPL 7536 are indicated in Figure 8. Should the project require the drilling and abstraction of water from an additional borehole, an application must be submitted to the authorities.

FIGURE 8 - REGIONAL HYDROLOGY MAP OF EPL 7536

5.5 VEGETATION

EPL 7536 is covered with the central Kalahari vegetation type of the Acacia three-and-shrub savanna sub-biome (Figure 9). Where the soils are shallower and the landscape hillier, plant growth tends to be shrubby. Eastwards, where the soils become deeper and the landscape flattens, vegetation is characterized by large, open expanses of grass dotted by trees and bushes (Mendelsohn et al., 2002). Most of the woody vegetation vary between 1 and 5m in height.

The most important environmental variable affecting the vegetation in this part of the country is rain and to a lesser extent frost, but micro-habitat conditions and rangeland management practices determine bush density and grass composition. Grazing resources are made up of a wide variety of grass species, which vary widely in palatability and abundance. Bush encroachment is noticeable, mainly on farmland exposed to continuous periods of selective grazing by livestock. Moreover, the densification of bush has led to a decreased carrying capacity on some farms in the area where EPL 7536 is located.
Plant diversity is estimated between 100 and 149 species and plant endemism is low, not exceeding five species (Mendelsohn et al., 2002). Local differentiation as a result of topographical variance and availability of water is possible though. Vegetation on the Kalahari dunes and on the sandy plains between dunes differ markedly, while diversity around pans and along drainage channels increases and plants become denser and higher. On rocky, elevated areas such as the hills and ridges, diversity increases too.

FIGURE 9 - REGIONAL VEGETATION MAP OF EPL 7536

5.6 FAUNA SPECIES

Overall terrestrial biodiversity where EPL 7536 is located, ranges from medium to low. As endemism trends in Namibia show a clear decline to the east, the number of endemic fauna species possible in EPL 7536 is expected to be low. The number of mammal species ranges between 61 and 75, the number of bird species is between 111 and 140, with 61 – 70 reptile species, 8 – 11 frog species and 10 – 11 scorpion species that could be expected (Mendelsohn et al., 2002). On a local scale it is expected that diversity increases with the increase in habitats, which is closely coupled to shelter, food and water availability and migration routes. Elevation and water availability play a prominent role in this regard and is directly related to the increase in terrestrial diversity towards the west.

5.7 SOCIO-ECONOMIC ENVIRONMENT

EPL 7536 is located within the Omaheke Region. The region is bordered by the Hardap Region in the south, by the Khomas Region in the west and the Otjozondjupa Region in the north. The eastern boundary of the region forms the international boundary with Botswana. The region is named after the Herero word for Sandveld. Gobabis is the regional capital.
Although the Omaheke Region covers more than 10% of the land area of Namibia, it accommodates the smallest portion (3.4%) of the national population total in 2016 (NSA, 2017) and is the third least populated region of Namibia with a density of 0.9 persons per km².

5.7.1 Demography

Namibia is one of the least densely populated countries in the world (2.8 person per km²). Vast areas of Namibia are without people, in contrast to some fairly dense concentrations, such as the central-north and along the Kavango River. Large parts of the Omaheke region is also without people, mainly because of the absence of surface water.

The population density of the Omaheke Region is three times lower than the national average, and the total population of the region was estimated at 74,629 in 2016 (NSA, 2017). Otjiherero is the most spoken language in the region (48% of all households) and the average household size in the Omaheke region comprises 3.5 persons. The literacy rate is 75% for people older than 15. 96% of all households have access to safe water, 56% have no toilet facility, 45% have electricity for lighting and only 63% of the population depend on open fires to prepare food (NSA, 2017).

In 2011 the population of Gobabis was 19,101 and with a generalized urbanization growth rate of 4.0% the current estimated population is estimated to be 27,187 residents.

5.7.2 Governance

Namibia is divided in 14 regions, subdivided by 121 constituencies. Omaheke Region is divided into seven constituencies. Each region has a regional council, elected during regional elections per constituency. Towns are governed through local authorities, in the form of municipalities.

Not only is Gobabis the capital, but also the largest town of the Omaheke Region. It is the only town in the region with a municipality. Many of the region’s head offices are located in the town. Other populated centres of the region are Drimiopsis, Epukiro, Tallismanis, Otjinene, Summerdown, Steinhausen, Omitara, Witvlei, Leonardville and Aminuis. These areas are managed as village councils mandated by the central authority, the Ministry of Urban and Rural Development, or as settlements managed directly by the central authority. Buitepos, on the border with Botswana, is a cross-border control point.

5.7.3 Employment

The rate of unemployment is estimated at 33.4% for Namibia, using the broad definition of unemployment. More than 60% of the population is over 15 years of age and about one-third of the total population can be regarded as part of the labour force. The unemployment rate in rural and urban areas is almost the same – 33.4% in urban areas and 33.5% in rural areas. The highest unemployment rates are found amongst persons with education levels lower that junior secondary. The unemployment rate of persons with no formal education is 28.6%, with primary education 34.6% and with junior secondary education 32.7% (NSA, 2019).
5.7.4 ECONOMY

The economy of the Omaheke Region is predominantly agriculture-based. Extensive livestock farming forms the livelihood of many people and is one of the reasons for the low intensity land use over much of the 84,742 km² the region covers, the low total population (74,629 in 2016) as well as the low population density (about 0.8 persons per km² in 2011). Large parts of the region are covered by commercial and communal farms, mainly for cattle ranching. Although not as many as in other regions, several former livestock farms became guest farms and hunting farms. Income and employment from tourism is growing, subsequently. On both commercial and communal land, bush encroachment decreased the carrying capacity of some farms markedly over the last four decades. The invader bush is managed in several ways, one of which is the production of charcoal for export. Of lately the charcoal industry became a significant source of income and employment in the rural parts of Namibia, including the Omaheke Region, with the operational NamChar factory as an example of this.

Several new government offices have been established in Gobabis as part of an effort to accentuate the town as regional capital. The town plays an important role as a centre of functional services – administrative as well as commercial – for the region, and Gobabis is an important node on the Trans-Kalahari Highway that connects landlocked Botswana with Walvis Bay.

Since 2016, Namibia recorded slow economic growth, registering an estimated growth of only 1.1% in 2016. The primary and secondary industries contracted by 2.0 and 7.8% respectively. During 2017 the economy contracted by 1.7, 0.7 and 1.9% in the first, second and third quarters respectively (NSA, 2019). Despite the more positive expectations, the economy retracted to an average growth of not more than 1% annually since 2017.

5.7.5 HEALTH

Since independence in 1990, the health status of Namibia has increased steadily with a remarkable improvement in access to primary health facilities and medical infrastructure. In 2015 the World Health Organization (WHO) recommended strategic priorities of the health system in Namibia which entail improved governance, an improved health information system, emergency preparedness, risk reduction and response, preventative health care and the combating of HIV/AIDS and TB (WHO, 2016).

According to the MoHSS health facility census (MoHSS, 2009) the Omaheke region only has a recorded 16 health care facilities. In 2016 it was estimated that one out of every five persons in the Omaheke Region is younger than four years of age, the highest figure in Namibia. In contrast, the percentage of young children that attend programs of early childhood development in the Omaheke Region is the second lowest in Namibia – only 11.7% (NSA, 2017), implying that access to these facilities and access to infant health care facilities is limited.

Like elsewhere in Namibia, the largest percentage of people in the Omaheke Region utilize clinics for medical care (37.5%). Less than 10% of the total population of the Omaheke Region receive their medical treatment from a doctor (NSA, 2017). The death rate of 19.5 deaths per 1000 people for Omaheke Region was the highest in Namibia in 2016 (NSA, 2017).
As of the beginning of 2020 the coronavirus disease (COVID-19), caused illness in humans at a pandemic scale and has resulted in an increasing number of deaths worldwide. The viral outbreak is adversely affecting various socio-economic activities globally, and with reports of the increasing number of people testing positive, it is anticipated that this may have significant impacts on the operations of various economic sectors in Namibia too. The disease caused many countries to enter a state of emergency and lockdown mode, with dire economic consequences. In addition, these measures have a detrimental effect on tourism – and Namibia is in both cases no exception.

5.7.6 HERITAGE

In Namibia several mountains are closely coupled to heritage values, and it is possible that this applies to some of the higher elevations in EPL 7536 as well. Drainage lines were also important routes for early inhabitants and it could be expected that some heritage assets along the Black Nossob could be found. In cases where heritage sites are discovered the chance-find procedure will be used.
6 IDENTIFICATION AND EVALUATION OF IMPACTS

The key stage of the EIA process is the impact prediction and evaluation stage. This stage is the process of bringing together project characteristics with the baseline environmental characteristics and ensuring all potentially significant environmental and social impacts are identified and assessed. Impact prediction and evaluation involve envisaging the possible changes to the environment as a result of the proposed project. The recognized methodology was applied to determine the magnitude of impact and whether or not the impact was considered significant and thus warrant further investigation. The assessment considers all stages of the project’s life cycle that is scoped into the assessment and is presented in this report. It is an iterative process that commences at project inception and runs through to the final design and project implementation (construction and operations). The impact prediction and evaluation stage were undertaken in September 2020 and the findings of the assessment are presented in this document.

6.1 INTRODUCTION

Chapter 2 provides an overview of the approach used in this EIA process and details each of the steps undertaken to date. Predication and evaluation of impacts is a key step in the EIA process. This chapter outlines the methods followed to identify and evaluate the impacts arising from the proposed project. The findings of the assessment are presented in this chapter.

This chapter provides the following:

- Details on the assessment guidance used to assess impacts;
- Lists the limitations, uncertainties and assumptions with regards to the assessment methodology;
- Details how impacts were identified and evaluated, and how the level of significance was derived; and
- Details how mitigation was applied in the assessment and how additional mitigation was identified.
FIGURE 10 - ECCS IMPACT PREDICTION AND EVALUATION PROCESS
6.2 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

The following limitations and uncertainties associated with the assessment methodology were observed:

- Topic specific assessment guidance has not been developed in Namibia. A generic assessment methodology was applied to all topics using IFC guidance and professional judgement;

- Guidance for CIA has not been developed in Namibia, and a single accepted state of global practice has been established. The IFC’s guidance document (International Finance Corporation, 2013) has been used for the CIA.

A number of limitations and uncertainties were acknowledged during the EIA process. In line with EIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed. Table 7 contains the assumptions and uncertainties identified during the assessment process.

Where uncertainties exist, a cautious approach has been applied, allowing the worst-case scenario for potential impacts to be identified. Where limitation and uncertainties exist, assumptions have been made and applied during the assessment process. These have been clearly described in the baseline section.

**TABLE 6 – SUMMARY OF LIMITATION, UNCERTAINTIES AND ASSUMPTION OF THE ESIA PROCESS**

<table>
<thead>
<tr>
<th>LIMITATION / UNCERTAINTY</th>
<th>ASSUMPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program of activities</td>
<td>As per the EPL award, work will take place over an initial three-year period to establish potential resources of interest. A detailed timeline of the activities is not available at this point in time; activities will be modified depending on work results. If commercially viable concentrations can be defined by preliminary drilling, a next phase of advanced resource drilling operations is possible.</td>
</tr>
<tr>
<td>LIMITATION / UNCERTAINTY</td>
<td>ASSUMPTION</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Phase 1 – 25 October 2019, on EPL award: Exploration activities involved desktop interpretation of, and mapping from, available airborne magnetic, radiometric and electromagnetic data, analysis of satellite imagery and archival data from the GSN.</td>
<td></td>
</tr>
<tr>
<td>Phase 2 – January 2021: Airborne electromagnetic (AEM) survey, and interpretation of these data, coupled with the commencement of soil sampling and geological mapping in specific target localities, to be determined by the above desktop interpretation.</td>
<td></td>
</tr>
<tr>
<td>Phase 3 – Mid 2021: RAB and/or Aircore drilling in select areas only (locations unknown), depending on results from the first two phases.</td>
<td></td>
</tr>
<tr>
<td>Phase 4 – Mid 2021 and 2022: Desktop reviews of all data and subsequent planning activities, which may lead to diamond core drilling, the timing of which will be dependent on progress of the previous phases. Trenching could be part of this phase.</td>
<td></td>
</tr>
<tr>
<td>It is assumed that exploration activities are limited to these stipulated undertakings.</td>
<td></td>
</tr>
<tr>
<td>Number of workers and area they will come from</td>
<td>It is planned that a full-time team will comprise up to 10 staff members and contract workers. The numbers of contractors are expected to include the following teams: field sampling and mapping; ground geophysics; possible trenching; and preliminary drilling. Moreover, staff will be sourced from the local authority areas such as Gobabis, Leonardville and Witvlei.</td>
</tr>
<tr>
<td>Water supply</td>
<td>Water will only be required for field camps once the drilling programme commences.</td>
</tr>
<tr>
<td></td>
<td>It is estimated that the water demand for domestic use would be 5,000 litres or less per day and for initial drilling purposes approximately 20,000 litres or less per day is needed. Agreements with farm owners to abstract water from privately owned boreholes will have to be reached between the proponent and the farm owners. The exact volume of water needed for advanced drilling campaigns are uncertain at this point in time.</td>
</tr>
<tr>
<td></td>
<td>Water is anticipated to be obtained from and transported to site, using a mobile water-bowser, from either a local farm or from a local authority. This is subject to permission granted by relevant farm owners or a permit from the local authority. If new boreholes are to be created for water supply purposes for the advanced exploration phase, the exact placement would need to be confirmed in relation to a drill grid.</td>
</tr>
<tr>
<td>Access route and creation of new tracks</td>
<td>The making of new tracks or access roads will be avoided, and existing tracks and routes will be used, as far as possible. While every effort will be made to minimize environmental damage, in some cases it will be necessary to clear some areas to create small roads or access lines to conduct exploration activities.</td>
</tr>
<tr>
<td>Structures</td>
<td>No permanent infrastructure development will take place in the greenfield phase of operations which will span the 3-year award period. Depending on results, the proponent will set up temporary field camps required to house field staff for the purpose of sample collection, ground surveys and drilling. The camps will be such that their locations can be fully rehabilitated post completion of the field work.</td>
</tr>
</tbody>
</table>
7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MANAGEMENT MEASURES

This chapter presents the findings of the EIA for the proposed project as per the EIA process, scope and methodology set out in Chapter 2 and Chapter 6. A range of potential impacts have been identified that may arise as a result of the proposed project. The aim of this EIA report is to focus on the significant impacts that may arise as a result of the proposed project. This chapter therefore only considers the significant impacts and or those that may have specific interest to the community and stakeholders. A summary of impacts that are considered significant is discussed in this section.

When undertaking the assessment exercise, the design of the proposed project and best practice measures were considered to ensure the likely significant effects and any required additional mitigation measures were identified. A summary of the potential impacts and mitigation and / or control measures are discussed below.

The following topics were considered during the scoping phase:

- Surface water and groundwater;
- Soils and topography;
- Landscape (visual impacts, sense of place);
- Socioeconomics (employment, demographics, and land-use);
- Noise;
- Ecology (fauna and flora);
- Air quality (emissions, pollutants and dust); and
- Cultural heritage.

Table 7 sets out the findings of the scoping assessment phase. Activities that could be the source of an impact have been listed, followed by receptors that could be affected. The pathway between the source and the receptor has been identified where both are present. Where an activity and/or receptor has not been identified, an impact is unlikely, thus no further assessment or justification is provided. Where the activity, receptor and pathway have been identified, a justification has been provided documenting if further assessment is required or not required.

Due to the nature and localised scale of the exploration activities, and the environmental context of the EPL, the potential environmental and social effects are limited and unlikely to be significant. The only area where uncertainty remained during the scoping phase was the potential cumulative effects on human receptors from the increase in noise levels and visual impacts. The receptors are mainly the farmers, neighbours and visitors, although noise may have an effect on some organisms as well.
### TABLE 7 - IDENTIFICATION AND EVALUATION OF IMPACTS AND MITIGATION MEASURES

<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
<th>RESIDUAL IMPACT AFTER MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundwater quality</td>
<td>Site operations such as maintenance activities, loss of containment, accidental fuel / hydraulic fluid leaks and spills, or similar sources.</td>
<td>Hydrocarbon leaks and spills could enter the aquifer causing contamination.</td>
<td>Adverse Direct Partly Reversible Moderate Short term Regional Possible</td>
<td>Medium</td>
<td>Minor</td>
<td>Minor (4)</td>
<td>Good house keeping</td>
<td>Low (2)</td>
</tr>
</tbody>
</table>

- Training through toolbox talks and induction
- All stationary vehicles and machinery must have drip trays to collect leakages of lubricants and oil
- Spill kits and absorption material available during fuel delivery, storage or use
- Accidental spills and leaks (including absorption material) to be cleaned as soon as possible
- Major spills to be reported, also to the authorities
- Maintenance and service schedules on equipment is in place
- Store bulk fuel in adequate containment areas (non-
<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
<th>RESIDUAL IMPACT AFTER MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundwater quality</td>
<td>Potential spillages of drill fluid, lubrication, etc. or exploration activities that penetrate the groundwater table.</td>
<td>Hydrocarbon leaks and spills could enter the aquifer causing contamination.</td>
<td>Adverse</td>
<td>Low</td>
<td>Minor</td>
<td>Low (2)</td>
<td>Ensure spill kits and preventative measures (e.g. drill pads) are in place at exploration sites. Drill system should be dug to direct any accidental spills into sumps. Extraction volumes of water shall be minimal during exploration.</td>
<td>Low (1)</td>
</tr>
</tbody>
</table>

- Ensure integrity of containment with regularly inspections.
- No damaged containers in use.
- Preventative measures will be in place when service and maintenance activities are done (drip trays, non-porous surfaces, funnels, non-damaged containers).
- Refuelling is done in areas with adequate preventative measures in place.
### Exploration Activities on EPL 7536
KUISEB COPPER COMPANY (PTY) LTD

#### December 2020

<table>
<thead>
<tr>
<th>Receptor</th>
<th>Description of Activity</th>
<th>Description of Impact</th>
<th>Effect/Description of Magnitude</th>
<th>Value of Sensitivity</th>
<th>Magnitude of Change</th>
<th>Significance of Impact</th>
<th>Impact Management/Control Measures</th>
<th>Residual Impact After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td>Discharge and infiltration of non-contained wastewater</td>
<td>Wastewater can contaminate surface and groundwater</td>
<td>Adverse Direct Partly Reversible Minor Short term Regional Unlikely</td>
<td>Low</td>
<td>Minor</td>
<td>Low (2)</td>
<td>Wastewater discharges will be contained Workers will be made aware about the importance of wastewater management Good housekeeping Ensure prompt clean-up of spills</td>
<td>Low (1)</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Inadequate management of waste</td>
<td>Waste items and litter can pollute drainage channels</td>
<td>Adverse Cumulative Reversible Minor Temporary Onsite Unlikely</td>
<td>Low</td>
<td>Minor</td>
<td>Low (2)</td>
<td>Good housekeeping Training and awareness through toolbox talks and induction Implement a Standard Operational Procedure (SOP) on waste management, from cradle to grave for all kinds of waste possible onsite (e.g. domestic, mineral, hydrocarbons, etc.)</td>
<td>Low (1)</td>
</tr>
<tr>
<td><strong>Soil</strong></td>
<td>Inadequate management of hazardous and hydrocarbon</td>
<td>Pollution of soil</td>
<td>Adverse Direct Reversible</td>
<td>Low</td>
<td>Low</td>
<td>Low (1)</td>
<td></td>
<td>Low (1)</td>
</tr>
<tr>
<td>RECEPTOR</td>
<td>DESCRIPTION OF ACTIVITY</td>
<td>DESCRIPTION OF IMPACT</td>
<td>EFFECT/DESCRIPTION OF MAGNITUDE</td>
<td>VALUE OF SENSITIVITY</td>
<td>MAGNITUDE OF CHANGE</td>
<td>SIGNIFICANCE OF IMPACT</td>
<td>IMPACT MANAGEMENT/CONTROL MEASURES</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>waste</td>
<td></td>
<td></td>
<td>Minor</td>
<td></td>
<td></td>
<td></td>
<td>Raise awareness about the importance of responsible waste management.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Short term</td>
<td></td>
<td></td>
<td></td>
<td>Implement a culture of correct waste collection, waste segregation and waste disposal.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Onsite</td>
<td></td>
<td></td>
<td></td>
<td>Avoid hazardous waste onsite.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Possible</td>
<td></td>
<td></td>
<td></td>
<td>Wastewater discharges will be contained – no disposal of wastewater or processing or tailings effluent.</td>
<td></td>
</tr>
<tr>
<td>Terrestrial ecology and biodiversity</td>
<td>Vegetation clearing for access routes and exploration activities</td>
<td>Loss / alteration of terrestrial habitats and loss of species</td>
<td>Adverse Direct Reversible Minor Short term Onsite Possible</td>
<td>Low</td>
<td>Minor</td>
<td>Low (2)</td>
<td>Use existing roads for access to avoid new tracks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimise clearance areas through proper planning of the exploration activities, especially at drill areas.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Where necessary, rescue and relocate plants of significance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Promote revegetation of cleared areas upon completion of exploration.</td>
<td></td>
</tr>
<tr>
<td>RECEPTOR</td>
<td>DESCRIPTION OF ACTIVITY</td>
<td>DESCRIPTION OF IMPACT</td>
<td>EFFECT/DESCRIPTION OF MAGNITUDE</td>
<td>VALUE OF SENSITIVITY</td>
<td>MAGNITUDE OF CHANGE</td>
<td>SIGNIFICANCE OF IMPACT</td>
<td>IMPACT MANAGEMENT/CONTROL MEASURES</td>
<td>RESIDUAL IMPACT AFTER MITIGATION</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------</td>
<td>-----------------------</td>
<td>-------------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Terrestrial ecology and biodiversity</td>
<td>Ambient noise as a result of machinery use (i.e. drill rigs), the diesel generator, and vehicle movement (also through the use of airborne equipment)</td>
<td>Residing, nesting and slow moving organisms can be disturbed</td>
<td>Adverse Direct Reversible Minor Short term Onsite Likely</td>
<td>Low</td>
<td>Low</td>
<td>Low (1)</td>
<td>Restrict excessive noise to areas of activities only. Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday) No activities between dusk and dawn. Exploration equipment shall be suitably positioned to ensure that noisy equipment is away from receptors. All equipment to be shut down or throttled back between periods of use. Respect civic aviation regulations about the use of a drone.</td>
<td>Low (1)</td>
</tr>
<tr>
<td>Terrestrial ecology and biodiversity</td>
<td>Increased movement of vehicles and equipment</td>
<td>Residing, nesting and slow-moving organisms can be disturbed</td>
<td>Adverse Direct Partly Reversible Moderate</td>
<td>Low</td>
<td>Moderate</td>
<td>Minor (3)</td>
<td>Restrict movements to areas of activities only. Use existing tracks and routes only.</td>
<td>Low (1)</td>
</tr>
<tr>
<td>RECEPTOR</td>
<td>DESCRIPTION OF ACTIVITY</td>
<td>DESCRIPTION OF IMPACT</td>
<td>EFFECT/DESCRIPTION OF MAGNITUDE</td>
<td>VALUE OF SENSITIVITY</td>
<td>MAGNITUDE OF CHANGE</td>
<td>SIGNIFICANCE OF IMPACT</td>
<td>IMPACT MANAGEMENT/CONTROL MEASURES</td>
<td>RESIDUAL IMPACT AFTER MITIGATION</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------</td>
<td>---------------------------------</td>
<td>---------------------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Terrestrial ecology and biodiversity</td>
<td>Veld fires during high wind periods</td>
<td>Terrestrial biodiversity destruction due to uncontrolled fire outbreaks</td>
<td>Adverse Direct Partly Reversible Moderate Temporary Onsite</td>
<td>High</td>
<td>Moderate</td>
<td>Moderate (6)</td>
<td>- No open fires are allowed to be lit by personnel associated with the proponent anywhere on the EPL outside of dedicated campsites. - The proponent to ensure that exploration is conducted safely.</td>
<td>Minor (4)</td>
</tr>
</tbody>
</table>

- Identify rare, endangered, threatened and protected species in advance.
- Route new tracks around protected species and sensitive areas.
- Restrict movements to daytime hours.
- Make workers aware and notify them on avoiding some areas.
- No driving off designated access routes / off-road driving.
- No animals or birds may be collected, caught, consumed or removed from site.
<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrestrial ecology and biodiversity</td>
<td>Increased disturbance of areas with natural vegetation</td>
<td>Alien species and weeds can be introduced to the area</td>
<td>Adverse Direct Reversible Minor Short term Onsite</td>
<td>Low</td>
<td>Low</td>
<td>Low (1)</td>
<td>Monitor areas of activity for weed and alien species Eradicate weeds and alien species as soon as they appear Make workers aware about alien species and weeds</td>
</tr>
</tbody>
</table>

- Campsites have proper cooking facilities available to use. Gas stoves are the preferred option.
- No cigarette butts are allowed to be discarded into the environment. These should be contained in appropriate domestic containment bins and disposed of at the local landfill site.
- No unauthorised movement beyond the exploration areas and campsites is allowed.
- Proper fire hazard identification signage to be placed in areas that store flammable material (i.e. hydrocarbons and gas bottles).
<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
<th>RESIDUAL IMPACT AFTER MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil</td>
<td>Vegetation clearing</td>
<td>Increased exposure due to vegetation clearance can cause soil erosion</td>
<td>Possible</td>
<td></td>
<td></td>
<td>Minor (3)</td>
<td>Ensure erosion control and prevention measures are in place when vegetation clearance is required, especially in upslope areas</td>
<td>Low (1)</td>
</tr>
<tr>
<td>Soil</td>
<td>Exploration activities, heavy equipment and vehicles</td>
<td>Loss of soil quality due to mixing of earth matter, trampling and compaction</td>
<td>Adverse Direct Reversible Moderate Short Term Onsite Possible</td>
<td>Low</td>
<td>Moderate</td>
<td>Minor (3)</td>
<td>Limit the possibility of compaction and creating of a hard subsurface Limit the possibility of trampling</td>
<td>Low (1)</td>
</tr>
<tr>
<td>RECEPTOR</td>
<td>DESCRIPTION OF ACTIVITY</td>
<td>DESCRIPTION OF IMPACT</td>
<td>EFFECT/DESCRIPTION OF MAGNITUDE</td>
<td>VALUE OF SENSITIVITY</td>
<td>MAGNITUDE OF CHANGE</td>
<td>SIGNIFICANCE OF IMPACT</td>
<td>IMPACT MANAGEMENT/CONTROL MEASURES</td>
<td>RESIDUAL IMPACT AFTER MITIGATION</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------</td>
<td>-----------------------</td>
<td>--------------------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Heritage</td>
<td>Exploration activities, movement of cultural</td>
<td>Potential damage to cultural</td>
<td>Onsite Possible</td>
<td>High</td>
<td>Major</td>
<td>Major (12)</td>
<td>Implement a Chance Find Procedure.</td>
<td>Minor (4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compacted soil areas should be loosed by ripping methods.
Where possible, topsoil should be stockpiled separately, and re-spread during rehabilitation.
During exploration activities with heavy equipment, oil absorbent matting should be placed under and around the equipment.
Equipment must be in a good condition to ensure that accidental oil spills do not occur and contaminate soil.
In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site.
Limit the possibility to mix mineral waste with topsoil.
<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
<th>RESIDUAL IMPACT AFTER MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>machinery and vehicles</td>
<td>heritage sites</td>
<td>Negligible</td>
<td>Permanent</td>
<td>Onsite</td>
<td>Possible</td>
<td>Raise awareness about possible heritage finds.</td>
<td>Report all finds that could be of heritage importance.</td>
<td>In case archaeological remains to be uncovered, cease activities and the site manager has to assess and demarcate the area.</td>
</tr>
</tbody>
</table>
### Table: Exploration Activities on EPL 7536

<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
<th>RESIDUAL IMPACT AFTER MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Exploration activities, including dust and emissions</td>
<td>Visual disturbance and temporary reduction in the sense of place</td>
<td>Adverse Direct Reversible Negligible Temporary Local Likely</td>
<td>High</td>
<td>Moderate</td>
<td>Major (9)</td>
<td>Limit trenching and bulk sampling as far as possible Position heavy equipment in such a way that it is out of sight from human receptors Apply dust suppression where possible (drilling, loading, hauling, tipping) Restrict speed of vehicles</td>
<td>Minor (4)</td>
</tr>
</tbody>
</table>

**appropriate action**, (record and remove; relocate or leave premises, depending on the nature and value of the remains).
Inform the police if the remains are human.
Obtain appropriate clearance or approval from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.
Specific activities that may generate dust and impact on residents shall be avoided during high wind events.

All vehicles and machinery / equipment to be shut down or throttled back between periods of use.

Barriers or fences shall be used if exploration occurs in locations that may affect people, livestock or wildlife.

Residents need to be informed at least two weeks in advance that exploration operations are within 1km of their property.

Maintain good housekeeping.

Continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and
<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
<th>RESIDUAL IMPACT AFTER MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Movement of vehicles, exploration activities</td>
<td>Create conflict with farm owners and neighbours about access, leaving gates open, suspicious movements, loss of farming area, etc.</td>
<td>Adverse Indirect Reversible Minor Short term Onsite Likely</td>
<td>Low</td>
<td>Minor</td>
<td>Low (1)</td>
<td>Ensure documented permission to enter farms Farmers should have access to all farm areas at all times Residents shall be provided at least two weeks’ notice of exploration operations within 1 km of their property Existing water points and feeding areas need to be left unaffected Use existing roads for access, avoid new tracks, clearances where possible Compliance with all applicable laws and agreements Continuous engagement with residents to identify any concerns or issues, and mitigation and management measures</td>
<td>Low (1)</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>RECEPTOR</th>
<th>DESCRIPTION OF ACTIVITY</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE</th>
<th>VALUE OF SENSITIVITY</th>
<th>MAGNITUDE OF CHANGE</th>
<th>SIGNIFICANCE OF IMPACT</th>
<th>IMPACT MANAGEMENT/CONTROL MEASURES</th>
<th>RESIDUAL IMPACT AFTER MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Movement of vehicles, exploration activities</td>
<td>Presence of exploration team can be blamed for stock theft and poaching</td>
<td>Adverse Cumulative Reversible Minor Temporary Local Unlikely</td>
<td>Low</td>
<td>Minor</td>
<td>Low (2)</td>
<td>Develop and implement an operation’s manual of procedures to work on private farms and implement monitoring programmes thereafter. Maintain continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon. Ensure appropriate supervision of all activities. Raise awareness and sensitize employees about contentious issues such as stock theft and poaching. Accidents and incidents need to be reported to the project manager and recorded in an incident register.</td>
<td>Low (1)</td>
</tr>
<tr>
<td>RECEPTOR</td>
<td>DESCRIPTION OF ACTIVITY</td>
<td>DESCRIPTION OF IMPACT</td>
<td>EFFECT/DESCRIPTION OF MAGNITUDE</td>
<td>VALUE OF SENSITIVITY</td>
<td>MAGNITUDE OF CHANGE</td>
<td>SIGNIFICANCE OF IMPACT</td>
<td>IMPACT MANAGEMENT/CONTROL MEASURES</td>
<td>RESIDUAL IMPACT AFTER MITIGATION</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Community and livestock</td>
<td>Airborne EM survey over the EPL, possible low flying, indication of line spacing</td>
<td>Perceived impact from low-flying EM survey activities on livestock and humans</td>
<td>Adverse indirect Reversible Minor Temporary Local Unlikely</td>
<td>Low</td>
<td>Minor</td>
<td>Low (2)</td>
<td>Prior to conducting aerial surveys, both directly and indirectly affected parties should be informed in writing of exploration activities at least 2 weeks prior to conducting the aerial surveys. The following information is to be included in the written communication sent. This can be in the form of a Press Notice. - Company name, - Survey dates, time and duration, - Purpose of the survey, - Flight altitude, - Survey location, Map of survey area and flight lines, and - Contact details for enquiries.</td>
<td>Low (1)</td>
</tr>
<tr>
<td>Community</td>
<td>Exploration activities</td>
<td>Triggers job creation, skills development and</td>
<td>Beneficial Direct Reversible</td>
<td>Low</td>
<td>Minor</td>
<td>Low (2)</td>
<td>Maximize local employment. As far as possible promote</td>
<td>Low beneficial</td>
</tr>
<tr>
<td>RECEPTOR</td>
<td>DESCRIPTION OF ACTIVITY</td>
<td>DESCRIPTION OF IMPACT</td>
<td>EFFECT/DESCRIPTION OF MAGNITUDE</td>
<td>VALUE OF SENSITIVITY</td>
<td>MAGNITUDE OF CHANGE</td>
<td>SIGNIFICANCE OF IMPACT</td>
<td>IMPACT MANAGEMENT/CONTROL MEASURES</td>
<td>RESIDUAL IMPACT AFTER MITIGATION</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------</td>
<td>-----------------------</td>
<td>---------------------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td></td>
<td>opportunities for the local economy</td>
<td>Minor Short term Local Possible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>local procurement. Enhance development of local skills where possible.</td>
<td></td>
</tr>
</tbody>
</table>

8 ENVIRONMENTAL MANAGEMENT PLAN

The EMP for the proposed project is presented in Appendix A. It provides management options to ensure the impacts of the proposed project are minimised. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary.

The management measures should be adhered to during all stages of the exploration activities. All persons involved and partaking in the proposed activities should be made aware of the measures outlined in the EMP to ensure activities are conducted in an environmentally responsible manner.

The objectives of the EMP are:

- To include all components of the development and operations of the project;
- To prescribe the best practicable control methods to lessen the environmental impacts associated with the project;
- To monitor and audit the performance of operational personnel in applying such controls; and
- To ensure that appropriate environmental training is provided to responsible operational personnel.
9 CONCLUSION

ECC’s EIA methodology was used to undertake the environmental assessment for the proposed project to identify if there is potential for significant effects to occur as a result of the proposed project. Through the scoping process, the only risk to the environment was the potential for visual impacts and noise levels to increase thereby impacting human receptors in the area. All other social and environmental receptors were scoped out as significant effects were unlikely and therefore no further assessment was deemed necessary. Through further analysis and identification of mitigation and management methods, the assessment concludes that the likely significance of effects on humans from noise impacts is expected to be minor and prior awareness and communication about the project shall be encouraged. Various best practice and mitigation measures have been identified to avoid and reduce effects as far as reasonably practical, as well as ensure the environment is protected and unforeseen effect and environmental disturbances are avoided.
REFERENCES


APPENDIX B - Non-technical Summary
APPENDIX C- EVIDENCE OF PUBLIC CONSULTATION

The following was advertised in the ‘Republikein, Sun, and Allgemeine Zeitung’ newspapers on the 21st September 2020.
Donkerhoek begs council for toilets

Health hazard

Residents claim they’ve been living without proper toilets for the past 30 years.

Donkerhoek informal settlement residents in Khomas want the Khomas town council to introduce and equip proper toilet facilities to be established in the informal settlement.

The residents say they have been living in a health hazard for some time now. The settlement, which is located on the outskirts of Windhoek, has no proper toilet facilities. The residents use pit latrines and are forced to defecate in open spaces.

The protesters say they have been living in the settlement for over 30 years but have not been given proper toilet facilities. They also say they have been living in an environment that poses a health hazard to them and their families.

They say they have been living in the settlement for over 30 years but have not been given proper toilet facilities. They also say they have been living in an environment that poses a health hazard to them and their families.

Extram mural artist, Simon Nambele, was also present at the protest. He says he supports the residents who have been living in the settlement for over 30 years without proper toilet facilities. He says he is concerned about the health of the residents and their families.

He says he is concerned about the health of the residents and their families.

The residents say they have been living in the settlement for over 30 years but have not been given proper toilet facilities. They also say they have been living in an environment that poses a health hazard to them and their families.

They say they have been living in the settlement for over 30 years without proper toilet facilities.
The following was advertised in the ‘Republikein, Sun, and Allgemeine Zeitung’ newspapers on the 28th September 2020.

**Easing of fiscal consolidation policy**

Agriculture, ICT, health drives growth

ICT grew due to increased activities in the usage of data as demand surged up for data and calls as workers switch from working from offices to homes.

The real Gross Domestic Product contracted by 2.1 percent during the second quarter review, compared to a decline of 4.4 percent in the same quarter of 2020.

Drivers

The deeper reduction in the domestic economy was observed across all sectors of the economy, except for agriculture and forestry, ICT and health. The poor performance of the economy was mainly due to the impact of measures that were put in place to combat the spread of the coronavirus pandemic.

The agriculture and forestry sector surged to 2.2 percent in real value added during the second quarter of 2020, relative to a steep contraction of 21.4 percent registered during the same quarter of 2019, NBS added.

The main driver for the improved performance came from an increase in activities of the crop farming sub-sector, which posted a massive growth of 29.7 percent in real value added compared to decline of 4.2 percent in the corresponding quarter of 2019. The positive performance in the sector is attributed to the number of activities users that increased during the period under review, the report further indicates.

...
APPENDIX C.2 SITE NOTICE, LETTERS AND REGISTRATION FORM
NOTICE OF ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR
EXPLORATION ACTIVITIES FOR BASE AND RARE METALS AND PRECIOUS METALS, IN THE
KHOMAS AND OMAHEKE REGIONS, NAMIBIA

Environmental Compliance Consultancy cc (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in accordance with the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Kuiseb Copper Company (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Khomas and Omaheke regions, Namibia
Project ID: ECC-113-309

Proposed activity: The proponent proposes to carry out exploration activities for base and rare metals and precious metals in the Khomas and Omaheke regions in the Gobabis, Witvlei and Doringveld areas, of eastern Namibia. Exploration methods may include an airborne electromagnetic survey (non-invasive, coarse line spacing) and ground truthing, soil and rock-chip sampling, geological mapping and geophysical surveys. Exploration trenching and drilling may occur at a later stage should initial test results appear viable.

Purpose of the review and registration period: The purpose of the review and registration period is to introduce the proposed project and to afford Interested and Affected Parties (I&APs) an opportunity to register and comment on the Non-Technical Summary (NTS) and to ensure that potential issues and concerns are brought forward, captured and considered further in the assessment process.


How you can participate: ECC is undertaking the required environmental assessment and public participation process in terms of the Act. I&APs and stakeholders are required to register for the project at: https://eccenvironmental.com/projects/

Contact: Mr JS Bezuidenhout or Mrs J Mooney
Environmental Compliance Consultancy
Registration Number CC/2013/11404
PO Box 91193, Klein Windhoek
Tel: +264 81 669 7608
E-mail: info@eccenvironmental.com
Website: http://www.eccenvironmental.com
Identified Stakeholder and or Potentially Interested Party for:
Kuiseb Copper Company Exploration Activities

Dear Sir or Madam:

RE: NOTIFICATION OF ENVIRONMENTAL ASSESSMENT FOR EXPLORATION ACTIVITIES FOR BASE AND RARE METALS AND PRECIOUS METALS ON EPLs 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731, 7732 IN THE KHOMAS AND OMAHEKE REGIONS, NAMIBIA.

Environmental Compliance Consultancy (ECC) has been engaged by Kuiseb Copper Company (Pty) Ltd (the Proponent) to act on their behalf for the environmental clearance certificate application for the proposed exploration activities for base and rare metals and precious metals on EPLs 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731, 7732 in the Khomas and Omaheke regions, Namibia.

ECC is conducting the Environmental Impact Assessment (EIA) in terms of the Environmental Management Act, No. 7 of 2007 and will be submitted to the competent authority and the Ministry of Environment, Forestry and Tourism for a record of decision.

The proposed project is to conduct mineral exploration activities on EPLs 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731 and 7732. As part of the proposed exploration project, the following activities are envisaged, which shall be confirmed, as the exploration program is refined:

- Airborne geophysical surveys (non-invasive, coarse line spacing);
- Potential creation of access tracks, where existing tracks cannot be utilised;
- Limited vegetation clearing for the creation of tracks, and survey access; and
- Ground exploration activities may include soil and rock-chip sampling, geological mapping, geophysical surveys, temporary trenching, drilling and drill-core sampling.
This letter is intended to engage stakeholders and potentially Interested and Affected Parties (I&APs) of the project and provide a communication channel to ECC for the project. You have been identified as either a stakeholder, interested or affected party; therefore ECC wishes to inform you of how you can become involved in the project.

Public participation is an important part of the EIA process, as it allows public and stakeholders to obtain information about the proposed project. Public participation occurs at various stages throughout a project lifecycle including:

- Advertising in newspapers;
- Distributing a Non-Technical Summary (NTS) to identified stakeholders and I&APs;
- Registered I&APs will also be informed of the available draft scoping report for a 7-day comment and review period, during this period I&APs will have the opportunity to review the draft document and raise any issues or concerns, and
- Stakeholders and I&APs who wish to register as an I&AP must do so on the ECC website as per the link provided below: https://eccenvironmental.com/projects/

If you are unable to complete the registration form online please email info@eccenvironmental.com and request an electronic copy of the form that you can complete, sign, scan and return via email to info@eccenvironmental.com to register as an I&AP for the project.

ECC values community input and participation in our projects and we look forward to working with you as the project develops.

The NTS can also be obtained from our website and provides a brief overview of the proposed project https://eccenvironmental.com/projects/.

Should you have any questions or require additional information please do not hesitate to contact either of us.

Yours sincerely,

Stephan Bezuidenhout
Environmental Compliance Consultancy
Contact: 081 669 7608
Email: stephan@eccenvironmental.com

Jessica Bezuidenhout (Mooney)
Environmental Compliance Consultancy
Contact: 081 669 7608
Email: jessica@eccenvironmental.com
INTERESTED AND AFFECTED PARTIES REGISTRATION FORM

PROJECT DETAILS

ECC Project Reference: ECC-113-309 Kuiseb Copper Company

Project Title: Exploration Activities on EPL 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731, 7732

Applicant: Kuiseb Copper Company (Pty) Ltd

This form serves to register Interested and Affected Parties (I&AP’s) for the above-mentioned project(s) and to solicit input and participation. This form will be submitted to the competent authority for consideration in the decision making process.

<table>
<thead>
<tr>
<th>INTERESTED AND AFFECTED PARTIES (I&amp;AP) DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title (Mr/Mrs/Dr/Prof.):</td>
</tr>
<tr>
<td>First Name:</td>
</tr>
<tr>
<td>Surname:</td>
</tr>
<tr>
<td>Cell Phone:</td>
</tr>
<tr>
<td>Telephone other:</td>
</tr>
<tr>
<td>Email Address:</td>
</tr>
<tr>
<td>Postal Address:</td>
</tr>
<tr>
<td>Organisation and/or property description (if landowner/lawful occupier):</td>
</tr>
<tr>
<td>Stakeholder Group (please tick)</td>
</tr>
<tr>
<td>□ Member of Affected Community</td>
</tr>
<tr>
<td>□ Non-Governmental Organisation (NGO)</td>
</tr>
<tr>
<td>□ Provincial or Government Official</td>
</tr>
<tr>
<td>□ Local or District Official</td>
</tr>
</tbody>
</table>

GENERAL INTEREST IN THE PROJECT

Please describe the nature of your interest in this project.
INTERESTED AND AFFECTED PARTIES REGISTRATION FORM

<table>
<thead>
<tr>
<th>GENERAL INTEREST IN THE PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have any specific concerns associated with the Project (for example: water, soil, pollution, Cultural or historical)?</td>
</tr>
</tbody>
</table>

| If you know of anyone else who should be informed about the project, please provide their contact details: |
| Title (Mr/Mrs/Dr/Prof.): |
| First Name: |
| Surname: |
| Cell Phone: |
| Telephone other: |
| Email Address: |
| Postal Address: |
| Organisation and/or property description (if landowner/lawful occupier) |

ECC respectfully requests that you please sign this letter and return it to info@eccenvironmental.com to confirm that you have received notification with regard to the above, and to ensure that your comments, concerns or objections are recorded. All comments, queries, and concerns must be received via this I&AP registration form and questionnaire or alternate means. Please note that only registered I&AP’s will included in future correspondence regarding this process.

Signed........................................... Name........................................... Date...........................................
Environmental Compliance Consultancy website:  
www.eccenvironmental.com
APPENDIX C.3

Commentary log of comments received from registered I&APs.
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHAPTER</th>
<th>SECTION</th>
<th>I&amp;AP / STAKEHOLDER COMMENT RECEIVED</th>
<th>STAKEHOLDER DETAILS</th>
<th>RESPONSE / CLARIFICATION</th>
</tr>
</thead>
</table>
| 1   | -       | -       | The project advertised today ECC-113-309-ADT-60-A does not appear on the website. When will same be listed? regards | Mr. Ronald L Kubas 21.09.2020 | Response from ECC 21.09.2021  
Dear Mr. Kubas,  
Thank you for your enquiry.  
Please note that the Non-Technical Summary (NTS) also referred to as a background document is now available on our website by following the link below. This document introduces the project and sets out the means of engagement between interested and/or affected parties (I&APs) and the consultant (ECC).  
| 2   | -       | -       | Dear Madam/Sir,  
on Friday morning 9th October 2020 I noticed a person on the C 23 road to Leonardville setting up the notification board | Ursula Lüsse 12.10.2021 | Response from ECC 13.10.2021  
Dear Mrs. Ursula Lüsse,  
Thank you for your email. |
on our farm, not far from our farmyard, announcing the environmental assessment....... for project exploration 7528 etc.....

Had I not seen the board by coincidence we wouldn’t have known about it and the already almost run-down registration period until the 12th of Oct 20 would have expired.

Herewith I am complaining about the notification procedure which is

- too late

-indirectly, unpersonally and anonymously

I am appealing you to inform the public in a way that potentially interested and affected parties can actually be involved. The way it was done now creates the impression of deliberate negligence and causes a mistrust that is definitely not in mutual interest.

I recommend that you get addresses of farmers association where the information could be spread with more people knowing what it is all about and what to do.

Thank you in advance

ECC is currently in the Public Participation phase of the assessment, which is to collect the details of direct and indirectly affected or interested parties through various means including site notices placed on or along the boundary of the project site.

In addition, adverts were published in The Namibian Sun, Republikein, and Allgemeine Zeitung newspapers on the 21st and 28th of September 2020.

Kindly take note that prior to the placement of the site notices in and around the project area, ECC has been in communication with the Farmers Associations for the Gobabis and Witvlei areas to gather information and compile a list of directly affected farm owners. Thus far only a few names could be retrieved, while the respective associations are still busy collecting more details on our behalf. The association has confirmed that it would distribute the draft environmental impact assessment document and management plan to its members once it is received.

Although the legislation stipulates that Interested and Affected Parties (I&AP) should be afforded a period of 21 days to raise their comments and concerns, ECC still accepts any comments raised after the stipulated period. Therefore, should anyone like to comment on the project prior to its
<table>
<thead>
<tr>
<th>3</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dear Madam/Sir,</strong></td>
<td><strong>Ms Irene Human</strong>&lt;br&gt;(12.10.2021)</td>
<td><strong>Response from ECC 13.10.2021</strong></td>
</tr>
<tr>
<td>On Sunday 11 October 2020 late afternoon I was informed of a board next to the road (C23) on my farm that wasn’t there on Saturday morning. I drove there just to see if it is a notification board, announcing the environmental assessment …. Exploration activities on EPLs 7528, 7529, 7530 ect. Had someone not noticed the board by coincidence and let me know about it, the already almost run-down registration period until 12 October 2020 would have expired.</td>
<td><strong>Dear Ms Human,</strong>&lt;br&gt;(12.10.2021)</td>
<td></td>
</tr>
<tr>
<td>Thank you for your email. ECC is currently in the Public Participation phase of the assessment, which is to collect the details of direct and indirectly affected or interested parties through various means including site notices placed on or along the boundary of the project site. In addition, adverts were published in The Namibian Sun, Republikein, and Allgemeine Zeitung newspapers on the 21st and 28th of September 2020.</td>
<td>Thank you for your email.</td>
<td></td>
</tr>
</tbody>
</table>

submission to the government, you are welcome to do so.

In the meantime, we have registered you as an I&AP for the project and will appreciate if you could provide us with details of your neighboring farmers in order for us to register them and keep them informed throughout the process.

Kindly find the attached Non-Technical summary as well as the letter to stakeholders.

For any further information, do not hesitate to contact us.
Thank you.
Herewith I am complaining about the notification procedure which is:

- too late and completely out of order
- indirectly, impersonal and anonymously

I am appealing you to inform the public in a way that potentially interested and affected parties can actually be involved. The way it was done now creates the impression of deliberate negligence and causes a mistrust that is definitely not in mutual interest.

I recommend that you get addresses of farmers from the NAU or the different farmers associations where the information could be spread with more people knowing what it is all about and what to do.

Thank you in advance

Kind regards

Kindly take note that prior to the placement of the site notices in and around the project area, ECC has been in communication with the Farmers Associations for the Gobabis and Witvlei areas to gather information and compile a list of directly affected farm owners. Thus far only a few names could be retrieved, while the respective associations are still busy collecting more details on our behalf. The association has confirmed that it would distribute the draft environmental impact assessment document and management plan to its members once it is received.

Although the legislation stipulates that Interested and Affected Parties (I&AP) should be afforded a period of 21 days to raise their comments and concerns, ECC still accepts any comments raised after the stipulated period. Therefore, should anyone like to comment on the project prior to its submission to the government, you are welcome to do so.

In the meantime, we have registered you as an I&AP for the project and will appreciate if you could provide us with details of your neighbouring farmers in order for us to register them and keep them informed throughout the process.

Kindly find the attached Non-Technical summary as well as the letter to stakeholders.
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Chapter 4 and EMP</td>
<td>Section 4.3, 4.8, 4.9 and EMP</td>
<td>more details on scope of mining water usage secure environment security road usage and much more issues</td>
<td>Werner &amp; Renate Bader (12.10.2021)</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>-</td>
<td>Dear Ms Nangula, kindly contact Nina Farmers Association: <a href="mailto:ninaboerevereniging@gmail.com">ninaboerevereniging@gmail.com</a> in order to cover a number of potentially I&amp;APs and please also attach a detailed map of the proposed undertakings. Kind regards Ursula Lüsse</td>
<td>Ms Ursula Lusse (12.10.2021)</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>-</td>
<td>Good day Mrs Nangula</td>
<td>Ms Iris Stehn</td>
</tr>
</tbody>
</table>
The board of the Nina Farmers Association held yesterday its meeting. It was decided that we are going to inform OUR members.

We can’t speak for those who are not members of our association and therefore you need to follow up your information with neighbouring farmers.

Thank you.

Iris Stehn

(16.10.2021)

Thank you for your response. That would be greatly appreciated.

Would you kindly provide us with your details and that of your members for us to communicate with them in writing? (Email and postal addresses).

Thank you.

Dear Ms. Amwele

We received the attached information from our Farmer’s Union on 15/10/2020.

Please note that I direct this to you just in an effort to understand what the implications of this may be, and that by no means are we trying to just be “difficult”.

Although I can only speak from my own viewpoint and do not have authorisation to do so on behalf of others, I wish to mention some points:

1. This is the first time that we had any mention of these activities in our area.

Mr Herman Kuschke

16.10.2020

Clarifications or responses to each individual point raised follows below.

I&AP COMMENT (Mr. Hermann Kuschke) ECC RESPONSES

1. Response to point 1: Thank you for informing us of the poorly chosen site location for this sign, we would like as many affected people to see it – as we are not in the area we would be most appreciative if you would or someone would like to move it to a more suitable location.

Please also note that four additional site notices were placed at various locations within the broader project area including Gobabis and Witvlei.

2. Response to point 2: All comments received after the 28th of September are still valid and will be incorporated into the assessment reports. We
Apparently, an information sign had been put up at Farm Gum-gams, about 60km from us at Farm Constance, on a road which we almost never use and therefore we will not see such a sign.

2. If the 21 days since 28/9/2020 is still applicable, then please note that I am particularly concerned, even though most of us have no idea of what the consequences of this operation may be.

3. I also wish to request you to explain to us exactly what this whole operation means, and what are the practical consequences that may follow.

4. Please also inform us who the applicant of the prospecting licence is – we need to know what may happen on farmland which is our bread and butter.

Kind regards
Hermann Kuschke

Response to point 3: The details of the proposed project will be further explained in the EIA report to be made available to all the registered I&AP in due course. We would be willing to have a call with you to explain should this be of interested, kindly let me know.

4. Response to point 4: Kuiseb Copper Company (Pty) Ltd in joint venture partnership with Rio Tinto. - Kuiseb Copper is a Namibian company with sound exploration experience and knowledge. The company is only interested in base metals (for example Copper and Silver).

Good day Lovisa,

I herewith confirm that I’m acting on behalf of the following property owners -
1. H.S. van der Schyff, Deeds ID FML/00400/00REM, Anaboom (previous

Standard acknowledgement email was sent on the 19th October 2021.

Response to point A: At ECC our team use a variety of channels to reach out to, and establish contact with potentially interested or affected parties, some of the tools are more effective than others,
owner was P.G. Pretorius);  
2. B. Venter, Deed ID FML/00400/00002, Anaboom (previous owner F.G. de Jager);  
4. W.P. Michau, Deeds ID FML/00469/00003, Hertzog (previous owner W.S. Michau) and Deeds ID FML/00590, Tunis (previous owner W.S. Michau);  

Please register all the above-mentioned parties as relevant I&APs (contact details will follow below) -

1. H.S. van der Schyff: jayvds@gmail.com & schyfies@iway.na  
2. B. Venter: venter@iway.na  
3. D.F. du Plessis: duples@iway.na  
4. W.P. Michau: skaiarabians@iway.na  
5. C.J. Labuschagne: labuschagnestoffel@gmail.com

A. None of the above-mentioned parties have received any communication regarding this application directly from ECC. Note that all the property owner information, except that of D.F. du Plessis, is wrong on the excel spreadsheet indicating the properties.

please allow us to explain our approach:
o Firstly, we access a database of farm owners and details from the Ministry of Land Reform (Deed office) – unfortunately, it is often the case, that the information on this governmental database is not accurate – but this is always our starting point. This is why some of the details in our excel are incorrect as they are sourced directly from the Government database.
o Secondly, we then try and verify this list and amend such details with entities/organisations and individuals on the ground through a public participation process (this is the phase we are currently in).
o Thirdly we also place site notices in locations where people can see them as another means to try and establish contact with potentially interested or affected parties. (Please note that newspaper notices were placed in three national newspapers for a two-week period (21/09/2020 and 28/09/2020)
§ The purpose of the advert is to notify the public of the assessment and invite them to register their interest in the project in order to receive more information and to be consulted with on an ongoing basis throughout the EIA process.
o We then place adverts in the newspapers as another means to try and establish a connection to potentially interested or affected parties (Please note that newspaper notices were placed in three national newspapers for a two-week period (21/09/2020 and 28/09/2020)

- Please understand that at no point in time is it ECC’s intention to utilise wrong information on
directly affected by the prospecting right application. This is a point of worry as it proves that the consultation process is not as effective as might be expected. Please indicate how ECC will rectify this issue?

B. It is mentioned in the NTS document that activities will be generally low-impact and non-intrusive, but that exploration activities might be "scaled up" depending on the exploration findings. Please define "scaled up".

C. It is furthermore mentioned that "temporary trenching" might make part of the ground exploration activities. We are of opinion that "temporary trenching" cannot be considered as low-impact nor non-intrusive. What will the extent of such trenching entail? And what will the rehabilitation thereof entail should it be decided that trenching should make part of the ground exploration activities?

D. Under paragraph 2.6 Potential Impact of the Project very few impacts have been identified as potential impacts. Are these all the impacts identified by ECC?

E. It is mentioned under paragraph 2.6.2 Environmental that some potential purpose and for this reason ECC has reached out to the farmers unions known to us within the project area.

- We would appreciate your cooperation with the provision of up to date contact details of your members with email addresses as this will greatly assist us in reaching the correct people.

Response to point B: Exploration programs generally commence with geological analytical activities i.e. desktop analysis of geological aerial maps, geological mapping, aerial surveys, soil sampling, etc. Depending on the findings from these initial activities more invasive methods (i.e. drilling) may be required to verify results and to zone in on a location of interest should something be identified in the first phase.

Response to point C: Trenching will only become an option in the rare event that drilling is not suitable for the project for various geological and or logistical reasons. More often than not simple soil sampling is conducted in preference to trenching. Rehabilitation of any exploration “feature” within the landscape will happen through a collaborative process between the explorer, the farmer, and the environmental consultants.

Response to point D: The full spectrum of Impacts assessed will be outlined in the environmental impact assessment report that will be made available to all registered I&APs for review and commentary in due course. The impacts are
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vegetation loss due to possible tracks creation; the vegetation is expected to recover fully during ensuing rain seasons. Please elaborate on this point in the case where trenching might occur and whether the restoration of the environment will be as simple as recovering during ensuing rain seasons, seeing that these properties affected are fully dependent on vegetation for the successful operation of the farms.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. It is mentioned that the use of resources, which include surface and groundwater, might be utilized during the exploration activities. Please indicate how the proponent is planning to approach this aspect.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. It is mentioned under paragraph 2.6.2 that minor risk of loss of contaminant of hydrocarbon, chemical or drill fluids from exploration activities potentially leading to localised ground contamination; this aspect will be controlled at all times. Please indicate how this potential impact will be controlled and mitigated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Under paragraph 3, which discusses the alternatives to the project, it is written that the activities shall be specific to the EPLs, which were granted by the MME. Please developed and assigned mitigation measures as the project progresses and as more information becomes available to us. Impacts are identified by ECC and also by the community in the consultation phase – which is why we are going to such lengths to make contact with them.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Response to point E:** During exploration activities, the first option is for the proponent to use existing roads or tracks to access work sites. However, sometimes drill sites are required in areas without road access, in which case new temporary tracks need to be created. To do this, minimal vegetation will be cleared if necessary and to required standards. The Environmental Management Plan (EMP) provides recommendations in this regard to preserve root systems for example and to preserve the extracted topsoil to resurface the track once drilling is completed. This is always communicated with the farmer and agreed on, and all relevant permits will be obtained.

**Response to point F:** If water is to be obtained directly from a farm owner’s borehole a signed agreement between the farm owner and the proponent will ensue. Access agreements will also be formalised and signed between both parties, and all relevant permits will be obtained.

**Response to point G:** The Environmental Management Plan will contain practical measures to be implemented on site to ensure proper
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>confirm whether the MME has already granted the EPLs or whether it is still to be granted.</th>
<th>containment structures are put in place as well as monitoring and management activities to ensure compliance to such measures.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is it accurate to say that the alternatives do not take into consideration location alternatives, but merely operational alternatives?</td>
<td><strong>Response to point H:</strong> The EPLs have been granted by the Ministry of Mines and Energy (MME). Alternatives are predominantly operational and technical alternatives.</td>
<td></td>
</tr>
<tr>
<td>I.</td>
<td>Please confirm in which stage the EISA currently is.</td>
<td><strong>Response to point I:</strong> The EIA is at the beginning of the process and we have commenced with the Public Participation Process (PPP) stage.</td>
<td></td>
</tr>
<tr>
<td>J.</td>
<td>It is mentioned under paragraph 4.1 that vegetation clearance might occur due to the creation of tracks and access, but also possibly for the set up for survey teams field camps. Please elaborate on the possible survey teams field camps and what it will entail.</td>
<td><strong>Response to point J:</strong> If they are required, details of field camps will be contained in the assessment report. Please see chapter 4 within this assessment report.</td>
<td></td>
</tr>
<tr>
<td>K.</td>
<td>A major concern is the water resource development, and that groundwater might have to be abstracted on the properties for the exploration activities. Please elaborate on how this aspect is planned to be approached in these areas considering that water plays a vital role in the day-to-day farming operations.</td>
<td><strong>Response to point K:</strong> The proponent aims to buy water from the local authority as their first point of call. Abstraction via private boreholes are subject to a mutually beneficial written agreement between the farm owner and the proponent. Should new boreholes be sunk, this will be subject to an abstraction permit from the Ministry of Agriculture, Water and land reform.</td>
<td></td>
</tr>
<tr>
<td>L.</td>
<td>Please indicate whether there will be any Stakeholder meeting (it is mentioned that it</td>
<td><strong>Response to point L:</strong> Yes, we certainly intend to have meetings with the stakeholders. An initial meeting was held with the Namibia Agriculture Union on Thursday 22nd October 2020. At this meeting it was resolved that all</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>5. Please indicate what the next steps in the process will be and when we can expect any elaborated reports regarding the exploration activities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regards</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Response to point M:** After public participation the reports will be developed which will include all comments received from the public participation phase and incorporated. The draft documents will then be circulated to all registered I&APs to review and comment on. From those comments received the Final reports will be drafted and submitted to government.

9

“Good day,

Various NAU members have contacted us with regard to your attached map and list of names.

Our Executive Manager, Mr Roelie Venter, would like to make an appointment with you to get more information about your exercise so that we can inform our members accordingly.

Would it be possible to meet with a representative from your firm on Monday, 19 October 2020 at 10:00 or 11:00?

I look forward to your feedback and thank you in anticipation.

Kind regards

Erika

Mrs Erika von Gierszewski
Namibia Agricultural Union
16.10.2020

Response from ECC on 19.10.2020

Dear Mrs. Erika,

Thank you for your email, an appointment has been made with Mr Venter for this coming Thursday at 10am in Windhoek regarding this. Our office is located at 1 Jan Jonker Way Klein Windhoek.

With kind regards,

Jessica Bezuidenhout (Mooney)

P.S. The meeting with the NAU was rescheduled for the 22.10.2020
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>Namibia Agricultural Union (NAU)*</th>
</tr>
</thead>
</table>
| 10 |   |   | **Good day Lovisa,**  
|    |   |   |  Thank you for elaborating on the concerns we’ve raised thus far.  
|    |   |   |  Just to clarify, are there going to be a public meeting scheduled to directly consult property owners as well?  
|    |   |   |  Regards  
|    |   |   | **Mr. Jandre van der Schyff**  
|    |   |   |  23.10.2020  
|    |   |   | **Dear Mr. van der Schyff,**  
|    |   |   |  We had a meeting with Mr. Venter from the NAU yesterday.  
|    |   |   |  In that meeting, it was resolved that ECC would attend the Gobabis and Windhoek Regional Agriculture Union’s (RAU) remaining quarterly meetings to introduce the EIA process in person and address all concerns that any farm owner may have with regards to this project.  
|    |   |   |  Once we have established contact with the unions and ascertained dates for this year, the unions will communicate our attendance to their members accordingly.  
|    |   |   |  Thank you.  

| 11 |   |   | **Hi Lovisa,**  
|    |   |   |  This email only has to do with one property - Ivanhoe, D.F. du Plessis (FML/00092).  
|    |   |   |  I’ve attached a map to this email for your reference. You will notice that the property at hand has a very small part being affected by the PR application (EPL-7543).  
|    |   |   | **Mr. Jandre van der Schyff**  
|    |   |   |  23.10.2020  
|    |   |   | **Response from ECC on 23.10.2020**  
|    |   |   |  Dear Mr. van der Schyff,  
|    |   |   |  Thank you for your query (as per the attached email).  
|    |   |   |  The license area has been granted by the Ministry of Mines and Energy (MME).  
|    |   |   |  The proposed exploration program will initially
The property owner has asked whether the proponent will consider removing that small part of the PR area from the property, excluding the property from the PR application? The area is ±290ha.

Looking forward to hearing back from you.

Regards
Thank you for your feedback Lovisa. We’ll wait for the results of the aerial survey then.

Regards
Jandré van der Schyff

include an airborne survey which will then allow the client to zoom in on areas of potential interest. Until the airborne survey work is completed it will be difficult to determine which areas are of interest or not.

We thank you for your understanding, if anything is unclear please do not hesitate to ask.

Thank you.

<table>
<thead>
<tr>
<th>12</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good morning Lester,</td>
<td>Mrs Erika von Gierszewski</td>
<td>Response from ECC on 30.10.2020</td>
</tr>
<tr>
<td>Attached please find the Farm Details – Kuiseb Copper Company. You will note that there are numerous farms whose owners are not members of the NAU. However, I think the spelling of some farm names are wrong and thus show as non-members on our member list. Furthermore I herewith attach a list of the Regional Agricultural Unions and Farmers Association managements for the Khomas and Omaheke regions.</td>
<td>Namibia Agricultural Union</td>
<td>Thank you for this Erika</td>
</tr>
<tr>
<td>Kind regards</td>
<td>29.10.2020</td>
<td>It is highly appreciated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kind regards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lester Harker</td>
</tr>
</tbody>
</table>
Good evening,

Just for clarification on your side, the ECC you send us is not applicable to our farm Grüental as we have an EPL 7029 registered.

Before sending out this information, make sure to reach the correct farm owners in the Omaheke Region.

Kind regards

Wilfried and Sonja Pack
11.11.2020

Response from ECC 23.11.2020

Dear Wilfried and Sonja Pack,

Thank you for your e-mail received on the 11 November 2020.

Please accept our apologies for wrongly including you in our email sent out to potentially Interested and Affected Parties (I&AP’s) on this project.

---

### COMMENTS RECEIVED BASED ON THE DRAFT SCOPOING REPORT AND EMP PROVIDED TO REGISTERED INTERESTED AND AFFECTED PARTIES (I&APS)

<table>
<thead>
<tr>
<th>#</th>
<th>-</th>
<th>-</th>
<th>PLEASE CALL ME URGENTLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>JEAN MARAIS SC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0811500117</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>And</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DEAR LESTER,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>THANK YOU FOR THE PROMPT RESPONSE. IT IS APPRECIATED.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REGARDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>JEAN MARAIS SC</td>
</tr>
</tbody>
</table>

Mr. Jean Marais
11.11.2020

Response from ECC 11.11.2020

Dear Mr Marais,

Thank you for your email and telephone conversation earlier.

As per your request to know whether or not your farm De Jager 279 is potentially affected, we can confirm that it is covered over by EPL 7534. However, your farm does not fall within the area of interest delineated for the exploration project.

Please do not hesitate to contact me should you require any further assistance.