













ECC-113-309-REP-90-A

ABRIDGED

ENVIRONMENTAL ASSESSMENT REPORT: AIRBORNE ELECTROMAGNETIC SURVEY

PREPARED FOR:

KUISEB COPPER COMPANY (PTY) LTD

NOVEMBER 2020



TITLE AND APPROVAL PAGE

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EXECUTIVE SUMMARY

Kuiseb Copper Company (Pty) Ltd (herein referred to as the Proponent), intends to undertake exploration activities on Exclusive Prospecting Licences (EPL) 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731, and 7732 in the Khomas and Omaheke regions, Namibia. The Proponent will explore for base, rare and precious metals.

This abridged report was produced from the full-length scoping report developed for this specific project, and presents a succinct summary of the main aspects of the intended exploration project and the impact assessment conducted for the project. The findings of the impact assessment are presented in section 5 of this report.

This report is intended to focus specifically on the Airborne Electromagnetic (AEM) survey as an integral part of the initial exploration program. The survey is a time-sensitive activity involving preplanning and communication with contractors and notification of affected parties (farm owners). It should be noted that the AEM survey will not involve any contact with the ground at all, other than use of the nearest commercial airfield. On this basis environmental clearance is sought here only for this activity, independent from the rest of the exploration activities proposed by the Proponent. This report therefore puts emphasis on the AEM survey as an exploration activity and its associated assessment.

Exploration activities trigger listed activities within the regulations (2012) of the Environmental Management Act (EMA) (2007), which require an environmental clearance certificate. As part of the environmental clearance certificate application, an Environmental and Social Impact Assessment (ESIA) has been undertaken to satisfy the requirements of the Environmental Management Act, No 7 of 2007.

The Airborne survey will commence as soon as a specific environmental clearance certificate has been granted by the Environmental Commissioner for this purpose. Such a non-invasive activity is a first stage of the exploration process. The airborne survey involves a specially equipped fixed wing aircraft or helicopter flying over the area along uniform flight lines, spaced at 400m or more, to map the geological substructure and mineral potential. This survey will then allow the proponent to determine smaller areas of interest and quickly exclude areas that have no further mineral exploration potential. The areas of interest that would be identified through the airborne survey will progress to the next stage of ground exploration, for which environmental clearance will be applied for separately to this application, and which may include initial field inspection of rock types, soil and rock chip sampling, and potentially drilling. It should be noted that the approved airborne contractor will be obliged to fulfill all norms and requirements of the NCAA.

Kuiseb Copper Company (Pty) Ltd, which will manage the entire exploration program, entered into a joint venture agreement with Rio Tinto Mining and Exploration (Pty) Ltd to explore the mineral potential within the EPLs listed above for base and rare, and precious metals. The Proponent has no other involvement with any other exploration activities within the area.

The overall potential impact of this proposed airborne survey will have no significant effects on the biophysical, social and economic environments due to the non-invasive nature of airborne surveys, during which no contact is made with the ground at all other than at the nearest commercial airfield. Nor does this process exceed recognised levels of acceptable change and does not threaten the integrity of the receptors.



TABLE OF CONTENTS

DEFIN	NITIONS AND ABBREVIATIONS	
1	INTRODUCTION TO THE PROJECT	6
1.1	SCOPE OF EIA WORK	6
1.2	AIRBORNE ELECTROMAGNETIC SURVEY	7
2	INTRODUCTION TO THE CLIENT	9
2.1	Commodity Focus	9
2.2	Proposed Exploration Methodology	9
2.3	Equipment Requirements	9
3	COMMUNITY AND STAKEHOLDER ENGAGEMENT	10
3.1	PUBLIC CONSULTATION PROCESS FOR AERIAL SURVEYS	11
4	ENVIRONMENT AND SOCIAL IMPACTS	12
4.1	THE ASSESSMENT PROCESS AND METHODOLOGY	12
4.2	THE SIGNIFICANCE OF AN IMPACT	12
4.2.1	DECIDING ON WHAT TO ASSESS FOR THIS PROJECT	13
4.2.2	TOPIC-BASED IMPACT IDENTIFICATION AND EVALUATION	13
4.3	Interpretation of findings	13
4.4	THE WAY FORWARD	13
5	ENVIRONMENTAL MONITORING AND MANAGEMENT	14
LIST O	OF APPENDICES	15

NOVEMBER 2020



DEFINITIONS AND ABBREVIATIONS

TABLE 1: LIST OF ABBREVIATIONS AND THEIR DESCRIPTIONS

ABBREVIATIONS	DESCRIPTION
AEM	Aerial Electro Magnetic
AoI	Areas of Interest
CAA	Civil Aviation Authority
DEA	Directorate of Environmental Affairs
ECC	Environmental Compliance Consultancy
ECC	Environmental Clearance Certificate
ESIA	Environmental and Social Impact Assessment
FA	Farmers Association
GSN	Geological Survey of Namibia
I&AP	Interested and Affected Parties
IFC	International Finance Corporation
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
NCAA	Namibian Civil Aviation Authority
RAU	Regional Agricultural Union



1 INTRODUCTION TO THE PROJECT

Kuiseb Copper Company (Pty) Ltd (herein referred to as the Proponent), intends to undertake an airborne electro-magnetic (AEM) survey on portions of Exclusive Prospecting Licences 7528, 7529, 7530, 7531, 7532, 7533, 7534,7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731, and 7732 in the Khomas and Omaheke regions, Namibia. The Proponent will explore for base, rare metals, and precious metals.



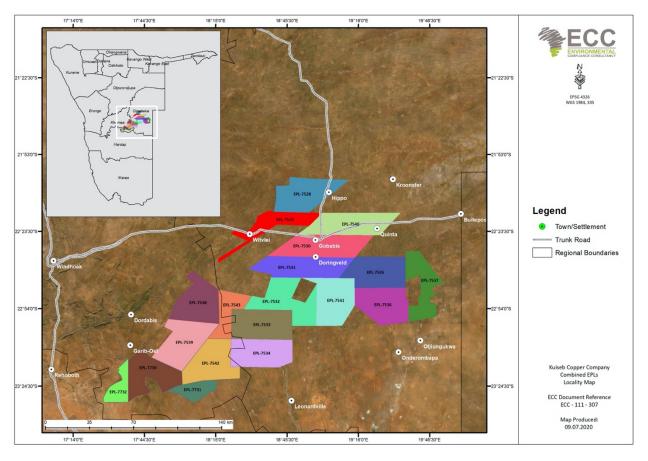


FIGURE 1: LOCALITY MAP OF EPLS WITHIN THE OMAHEKE AND KHOMAS REGIONS

1.1 Scope of EIA Work

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 application for an environmental clearance will be submitted to the relevant competent authorities, i.e., the Ministry of Mines and Energy (MME) and the Ministry of Environment, Forestry and Tourism (MEFT). The application contains an environmental scoping and impact assessment report and an environmental management plan. These documents are compiled in collaboration with Interested and Affected Parties (I&APs), the Proponent and ECC.



NOVEMBER 2020

The scope of this assessment is for the airborne electromagnetic survey as the most urgent non-invasive activity within the intended exploration program. ECC will register the application with the MEFT for this survey and submit this report, and the Environmental Management Plan as an application requesting environmental clearance for only the airborne electromagnetic survey to commence as early as January 2021.

1.2 AIRBORNE ELECTROMAGNETIC SURVEY

The aerial (AEM) survey to be conducted by the proponent will involve flying over small portions of selected EPLs with a minimum towed-bird height of 30 to 50 metres above ground level (AGL, as approved by NCAA) with a small aircraft or helicopter some 30m above this. Note that the footprint of the AEM survey will thus be less than 10% of the entire area of the EPLs, and the survey lines spacing will be coarse, 400m or more. Note also that these data sets may be of value to farmers in locating water resources.

Figure 2 delineates the potential areas of interest for the AEM survey proposed to take place in early 2021.



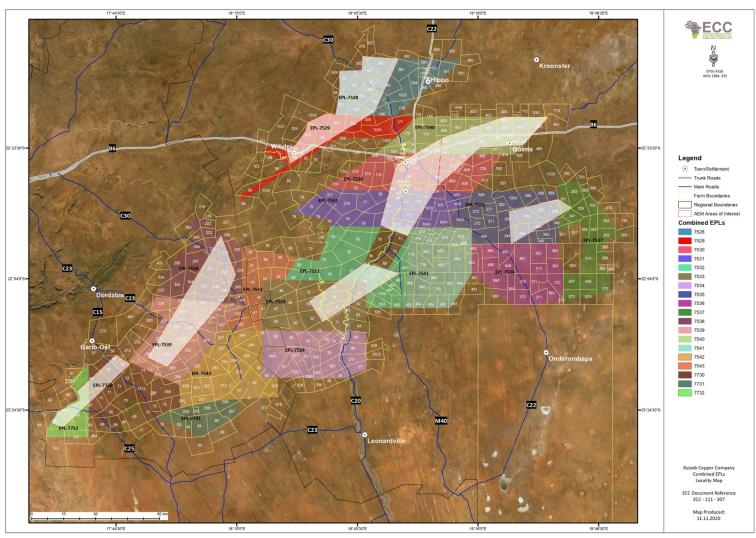


FIGURE 2: AREAS OF INTEREST (AOI) FOR THE AEM SURVEY (SHADED IN WHITE POLYGONS, CONFINED WITHIN APPROVED EPL AREAS)



2 INTRODUCTION TO THE CLIENT

Kuiseb Copper Company (Pty) Ltd is a registered Namibian company with sound knowledge and experience in the mineral exploration industry. Kuiseb Copper Company entered into a joint venture agreement with Rio Tinto Mining and Exploration (Pty) Ltd to explore the mineral potential within the 19 EPLs as listed above. Rio Tinto provides financing for the exploration activities and Kuiseb Copper Company manages the geo-technical activities.

2.1 COMMODITY FOCUS

The Joint Venture interest is in base, rare and precious metals (e.g., Copper and Silver). Although the total EPL area is vast in size, the focus of all exploration activities may only cover 30% or less of the total area. Exploration work can only commence once an environmental clearance certificate is granted by the Directorate of Environmental Affairs (DEA).

2.2 Proposed Exploration Methodology

Exploration work will be entirely conducted by contracted geological and geophysical consultants, and in later phases by drilling companies. The schedule of activities below (Table 3) is planned for the project.

TABLE 2: LIST OF ACTIVITEIS PLANNED PER PHASE

PHASE	DATE	ACTIVITY DESCRIPTION
Phase 1: 2020	Desktop work commenced 2019: Field inspection commencement date as soon as possible,	Exploration activities involve desktop interpretation of available airborne magnetic and radiometric data, geological maps, analysis of satellite imagery and archival data from the Geological Survey of Namibia (GSN). Additionally, preliminary field inspection of onsite geology and possibly initial stream sediment sampling may take place.
Phase 2: 2020/21	Actual commencement date preferably January 2021:	Airborne electromagnetic (AEM) survey (January 2021), as above, and interpretation thereof, coupled with the commencement of field inspection of outcrops, soil sampling and geological mapping in specific target localities, to be determined by the above desktop interpretation and AEM survey.

2.3 EQUIPMENT REQUIREMENTS

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

 A fixed-wing aircraft or helicopter to conduct the AEM survey, stationed at the closest commercial airfield, e.g., Windhoek, Gobabis.



3 COMMUNITY AND STAKEHOLDER ENGAGEMENT

Community engagement is an important component of the environmental clearance application. The Environmental Management Act's regulations of 2012 broadly refers to community engagement as the public consultation process under subsection 21. This includes the publishing of newspaper adverts in two national newspapers for a two-week period and the placement of notice boards along the boundary or on the site under assessment, and to give written notice to the owners and occupiers of land adjacent to the site where the activity is or is to be undertaken. These steps have already been implemented, as indicated below.

Over and above being compliant with statutory requirements for public consultation, early onset participatory communication with all stakeholders is essential and should commence before, or at the same time as the exploration program is initiated. This process has already commenced, as indicated below.

The main reason for this is to build and maintain an open and transparent process of dual information sharing and in order to ensure clear understanding and collaboration between the explorer, landowners, neighbours, the local community, the government and all other stakeholders (Namibian Best Practice Guide, 2018).

Community engagement for the current EIA to date.

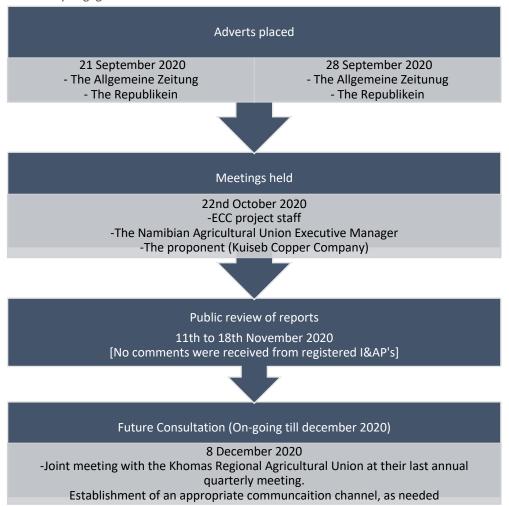


FIGURE 3: ILLUSTRATION OF COMMUNICATION TO DATE



3.1 PUBLIC CONSULTATION PROCESS FOR AERIAL SURVEYS

Prior to undertaking aerial surveys, the Proponent will inform the public of the survey. Best practice suggests such a notice be provided to I&APs at least two weeks prior to the aerial survey being conducted. This provision is also contained in the accompanying EMP and will be enforced once an Environmental Clearance Certificate is granted. The following information is to be included in the written notification to be sent to the community:

- Airborne contractor Company name;
- Survey dates, time and duration;
- Purpose of the survey;
- Flight altitude;
- Survey location;
- Map of the survey area and flight lines, and
- Contact details for enquiries.

For airborne surveys to be conducted, the Namibian Civil Aviation Authority (NCAA) requires written notification to be submitted prior to conducting the survey. The notice should contain, but not limited to, the following information:

- Licence of the aircraft;
- Licence of the pilot;
- Map of the area to be surveyed;
- Flight lines;
- Aircraft number;
- Duration and exact time of the survey, and
- Flying altitude.

If a foreign contractor is used a Foreign Operators Permit (FOP) must be obtained from the Namibian Transport Commission and Namibian Aviation Authority. It is obligatory that all foreign operators must operate under the license of a Namibian aircraft operating company.



4 ENVIRONMENT AND SOCIAL IMPACTS

4.1 THE ASSESSMENT PROCESS AND METHODOLOGY

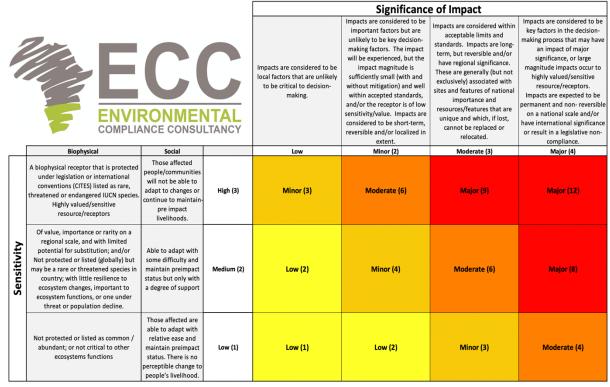
The EIA methodology applied to this assessment has been developed using the International Finance Corporation (IFC) standards and models, in particular Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International 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

An 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. The full impact assessment framework is contained in the main scoping report.

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.

4.2 THE SIGNIFICANCE OF AN IMPACT



The significance of impacts has been derived at by applying the identified thresholds for receptor sensitivity and magnitude of change, as well as the definition of significance. Moderate and major adverse impacts are considered as significant. The following thresholds were therefore used to double check that the assessment of



significance had been applied appropriately; a significant impact would meet at least one of the following criteria:

- It exceeds widely recognized levels of acceptable change;
- It threatens or enhances the viability or integrity of a receptor or receptor group of concern; and
- It is likely to be material to the ultimate decision about whether or not the environmental clearance certificate is granted.

For each impact identified for the proposed exploration activities, a significance rating and number is applied before the impact is addressed and after mitigation is applied per impact.

4.2.1 DECIDING ON WHAT TO ASSESS FOR THIS PROJECT

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 impact category is listed below.

Noise.

4.2.2 TOPIC-BASED IMPACT IDENTIFICATION AND EVALUATION

The following impacts were identified under each topic listed above and their assigned significance ratings.

- Perceived impact from low-flying EM survey activities on livestock and humans.
 - o Significance rating: Low (2) before mitigation and Low (1) after mitigation measures applied

4.3 INTERPRETATION OF FINDINGS

Through the scoping process, the only real risk to the environment was the potential for noise levels to increase thereby impacting human and animal receptors in the area. Note that, given the coarse line spacing (400+m) this would not be repetitive at the same locality. 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 to manage this impact effectively. 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 effects and environmental disturbances are avoided.

It should be noted that these data sets may be of value to farmers in locating water resources.

4.4 THE WAY FORWARD

- Comments on this abridged report or the full scoping report and environmental management plan should be forwarded to ECC using the contact details shown below:
 - Environmental Compliance Consultancy
 PO BOX 91193 Klein Windhoek, Namibia
 Tel: +264 81 669 7608

Email: info@eccenvironmental.com

- Commentary period ended on the 18 November 2020,
- Consider all comments received and update the reports where applicable and submit the final assessment reports to the competent authorities (MME and MEFT), and
- The competent authorities review the submission to derive at a record of decision.



5 ENVIRONMENTAL MONITORING AND MANAGEMENT

The EMP (Appendix A) for the proposed project provides effective 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 and will 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.



LIST OF APPENDICES

Appendix A: Combined EMP

Appendix B: NTS

NOVEMBER 2020

Appendix C: Proof of public consultation

Appendix E: CVs of ECC

PAGE 15 OF 15