



**Legend**

-  Main road
-  EPL 7730
-  Directly affected farms

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Site coordinates:  
 Latitude: -23.332974  
 Longitude: 17.783645  
 EPSG:4326 WGS 84  
 Scale 1:250,000



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0 2 4 6 8 10 km

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Reference: ECC/113/482  
 Cartography: J le Roux 04/2024





Submitted to: Kuiseb Copper Company (Pty) Ltd  
Attention: Dr Branko Corner and Dr Peter Hildebrand  
P O Box 2055  
Swakopmund  
Namibia

# REPORT:

## EXPLORATION ACTIVITIES ON EPL 7730

### COMPLIANCE REPORT

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PROJECT NUMBER: ECC-113-482-REP-56-A

REPORT VERSION: REV 01

DATE: 08 APRIL 2024



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## **EXECUTIVE SUMMARY**

The Proponent, Kuiseb Copper Company (Pty) Ltd (KCC), and Rio Tinto Mining and Exploration Ltd (RT), operating under a formal joint venture agreement, allow KCC full control over the exploration program for exclusive prospecting licence (EPL) 7730 in the Khomas Region, Namibia.

An environmental management plan (EMP) was developed and endorsed for EPL 7730, adhering to the approved environmental clearance certificate issued by the Ministry of Environment, Forestry and Tourism (MEFT) on June 8, 2021 (ECC-01411), valid until June 8, 2024.

Engagement with the farmers occurred during the specified period prior to the commencement of field exploration activities on or over their farms, and no environmental non-compliance or grievances were recorded.

## TABLE OF CONTENTS

<b>1</b>	<b>Introduction .....</b>	<b>7</b>
1.1	Background information.....	7
1.2	Purpose of this document .....	9
1.3	Proponent details .....	9
1.4	Environmental assessment practitioner.....	9
1.5	Landowner liaison.....	11
<b>2</b>	<b>Background to EPL 7730.....</b>	<b>12</b>
2.1	Renewal activities.....	12
<b>3</b>	<b>Environmental compliance audit .....</b>	<b>13</b>
3.1	Site activities .....	13
3.1.1	Bi-annual monitoring and reporting .....	13
3.1.2	Activities for the monitoring period .....	13
3.2	Environmental management plan and auditing .....	14
3.3	Compliance audit findings .....	14
3.4	Issues of non-compliance .....	14
<b>4</b>	<b>Exploration EMP Compliance Audit .....</b>	<b>15</b>
<b>5</b>	<b>Conclusion .....</b>	<b>31</b>
	<b>Appendix A – Exploration environmental management Plan for EPL 7730 .....</b>	<b>32</b>
	<b>Appendix B – EPL 7730 Environmental clearance certificate.....</b>	<b>33</b>
	<b>Appendix C – Bi-annual environmental reports 2021 - 2023 .....</b>	<b>35</b>

## LIST OF TABLES

Table 1 – Proponent details .....	9
Table 2 – Exploration EMP compliance audit (EPL 7730).....	15

## LIST OF FIGURES

Figure 1 – Site locality map for EPL 7730 .....	8
Figure 2 – Locality map of EPL 7730 with farm boundaries.....	11

## ABBREVIATIONS

Abbreviation	Description
AEM	airborne electromagnetic
CA	consent agreement
ECC	Environmental Compliance Consultancy (Pty) Ltd
e.g.	for example
EMP	environmental management plan
EPL	exclusive prospecting licence
etc.	et cetera
GPS	global positioning system
I&APs	interested and affected parties
JV	joint venture
km	kilometre
km/h	kilometre per hour
KCC	Kuiseb Copper Company (Pty) Ltd
L	litre
m	metre
MEFT	Ministry of the Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
MSDS	material safety data sheets
No.	number
RES	Remote Exploration Services
RT	Rio Tinto Mining and Exploration Ltd
SOP	standard operating procedure

# 1 INTRODUCTION

## 1.1 BACKGROUND INFORMATION

Kuiseb Copper Company (Pty) Ltd (KCC) (referred to as the 'Proponent') and Rio Tinto Mining and Exploration Ltd (RT), through a formal KCC-RT joint venture agreement, permits KCC to fully operate the exploration programme for exclusive prospecting licence (EPL) 7730 for base and rare metals, and precious metals in the Khomas Region, Namibia. EPL 7730 is currently registered under KCC with the Ministry of Mines and Energy (MME).

Exploration is a listed activity in terms of the Environmental Management Act, No.7 of 2007, and associated Regulations (2012). An environmental management plan (EMP) was compiled and approved for EPL 7730 (Appendix A) in line with the approved environmental clearance certificate, which was issued by the Ministry of Environment, Forestry and Tourism (MEFT) on 08 June 2021 (ECC-01411) (Appendix B) and expires on 08 June 2024. Additionally, a separate standalone environmental clearance certificate was issued for airborne electromagnetic (AEM) surveys over EPL 7730. The conditions and commitments of these documents must be adhered to during all exploration activities.

Figure 1 provides a locality map of EPL 7730, in relation to existing towns and major roadways. EPL 7730 is located southeast (SE) of the city of Windhoek, in the Khomas Region.



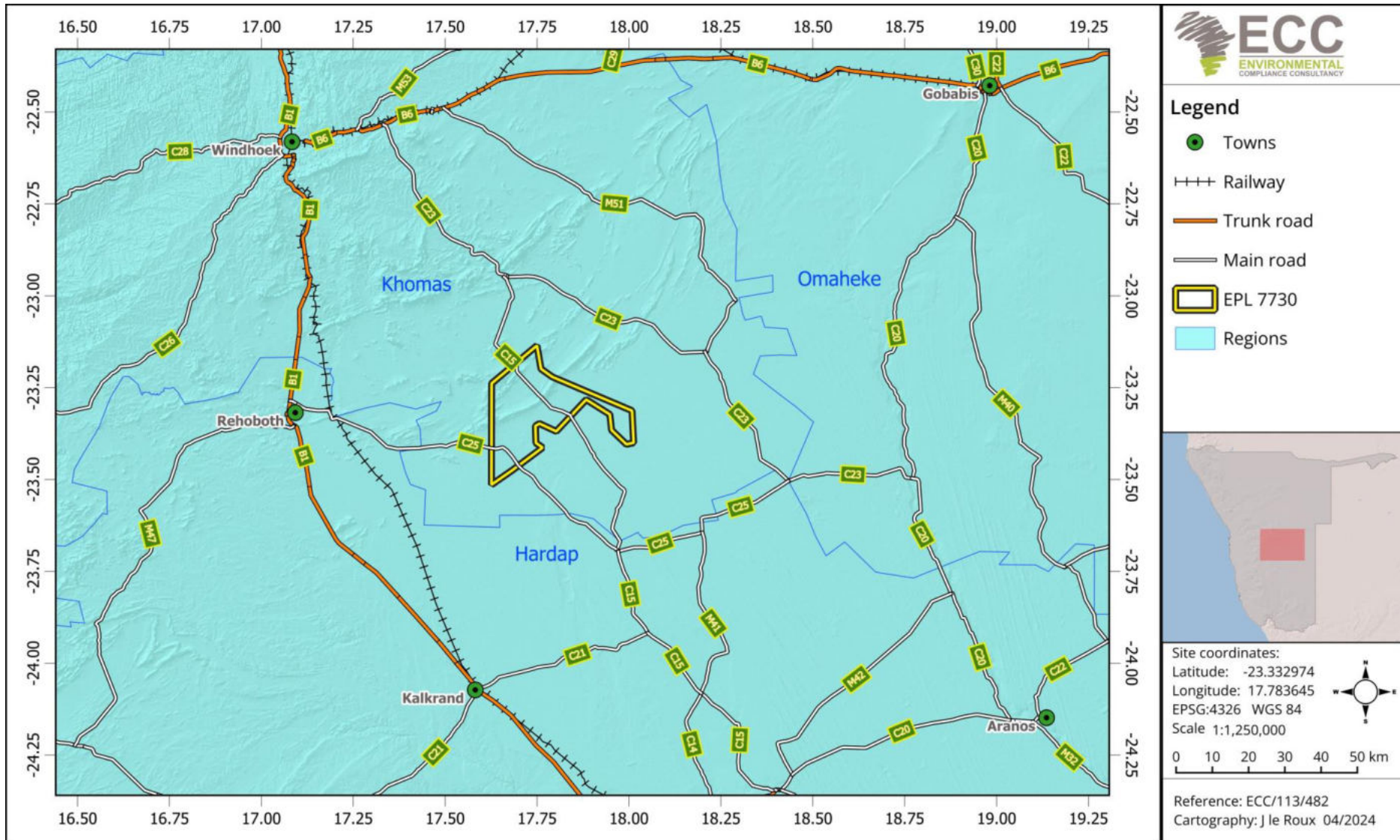


Figure 1 – Site locality map for EPL 7730.

## 1.2 PURPOSE OF THIS DOCUMENT

Environmental Compliance Consultancy (Pty) Ltd (ECC) has been engaged by the KCC, on behalf of RT, to prepare the application to renew the environmental clearance certificate for EPL 7730. The Proponent currently holds a valid environmental clearance certificate for exploration activities on EPL 7730, for which a renewal is being applied. As part of this application, an environmental compliance desktop audit has been undertaken to determine the status of compliance with the EMP. Past physical audits, reported on in previous bi-annual reports, also form the basis for review of compliance with EMP requirements.

## 1.3 PROPONENT DETAILS

Kuiseb Copper Company (Pty) Ltd is a Namibian company in a joint venture with Rio Tinto Mining and Exploration Ltd, which is a global company. The field exploration program is conducted and managed in part by Remote Exploration Services (RES), a South African company also registered in Namibia, Remote Exploration Services External Branch Namibia (Pty) Ltd. The Proponent's details are set out in Table 1.

**Table 1 - Proponent details.**

Contact	Postal Address	Email Address	Telephone
Kuiseb Copper Company (Pty) Ltd	P O Box 2055 Swakopmund Namibia	<a href="mailto:branko@iafrica.com.na">branko@iafrica.com.na</a>	+264 81 124 6757
Remote Exploration Services (Director: Mr Peter Hollick)	P O Box 97401 Maerua Mall Windhoek Namibia	peter@res.co.za	+264 81 274 3848

## 1.4 ENVIRONMENTAL ASSESSMENT PRACTITIONER

Environmental Compliance Consultancy (ECC) (Reg. No. 2022/0593) has prepared this renewal report and on behalf of the Proponent.

This report has been authored by employees of ECC, who have no material interest in the outcome of this report, nor do any of the ECC team have any interest that could be reasonably regarded as being capable of affecting their independence in the preparation of this report. ECC is independent from the proponent and has no vested or financial interest in the project, except for fair remuneration for professional fees rendered based upon agreed commercial rates. Payment of these fees is in no way contingent on the results of this report or the assessment, or a record of decision issued by Government. No member or employee of ECC is, or is intending to be, a director, officer, or any other direct employee of The Proponent. No member or employee of ECC has, or has had, any shareholding in the Proponent.

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

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### 1.5 LANDOWNER LIAISON

During the evaluation period, the Proponent and RES engaged in contact and relationship management with landowners. A productive on-site meeting was convened at the Versailles farm (No.67), situated within the EPL. During this meeting, the Proponent outlined KCC’s planned activities, such as the airborne electromagnetic (AEM) survey and proposed subsequent fieldwork.

Figure 2 provides the locality map of EPL 7730 with farm boundaries and farm numbers indicated.

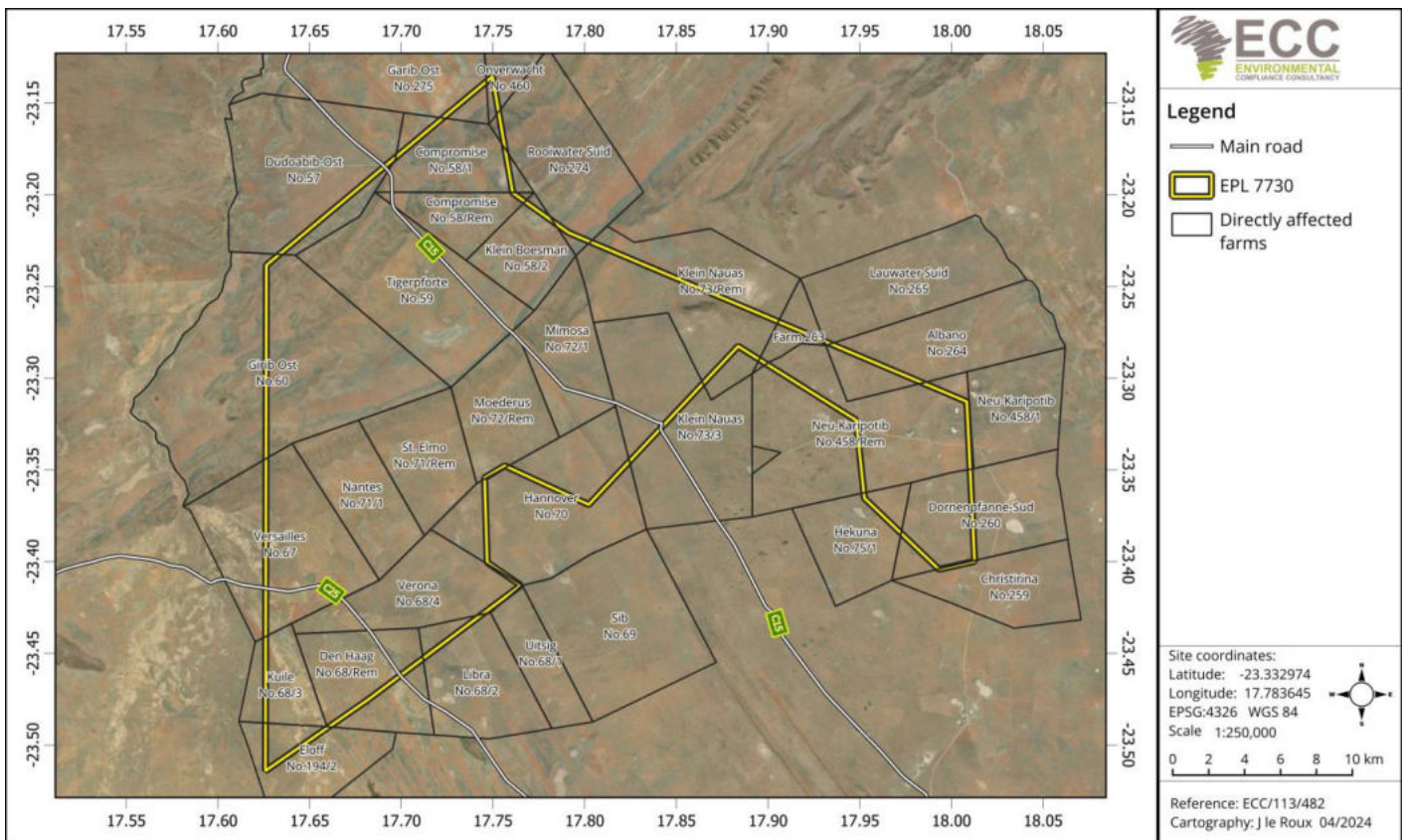


Figure 2 - Locality map of EPL 7730 with farm boundaries.



## **2 BACKGROUND TO EPL 7730**

EPL 7730 was granted to Kuiseb Copper Company on 17 March 2020 and was renewed on 16 March 2023. An environmental clearance certificate was issued to by the Ministry of Environment, Forestry and Tourism (MEFT) on 08 June 2021 which expires on the 08 June 2024.

EPL 7730 is located southeast of Windhoek, in the Khomas Region and is 64730.8317 hectares in extent.

The Proponent wishes to continue with exploration activities on EPL 7730 for base and rare metals, and precious metals, hence an ECC renewal is being applied for.

### **2.1 RENEWAL ACTIVITIES**

As part of the exploration programme, the following activities are envisaged:

- Airborne geophysical surveys (non-invasive);
- Potential creation of access tracks, where existing tracks cannot be utilised;
- Limited vegetation clearing for creation of tracks and survey access;
- Ground exploration activities may include soil and rock-chip sampling, geological mapping, geophysical surveys, temporary trenching, drilling and drill-core sampling; and
- Rehabilitation of exploration activities.



## 3 ENVIRONMENTAL COMPLIANCE AUDIT

### 3.1 SITE ACTIVITIES

#### 3.1.1 BI-ANNUAL MONITORING AND REPORTING

Bi-annual environmental reports, covering the periods from July 2021 to December 2023, were submitted to the Ministry of Environment, Forestry, and Tourism. These reports assessed environmental performance and compliance related to on-site exploration activities. They can be found in Appendix C.

#### 3.1.2 ACTIVITIES FOR THE MONITORING PERIOD

##### 3.1.2.1 *July to December 2021*

During the reporting period spanning from September to December 2021, the airborne electromagnetic survey (AEM) survey was conducted, and its duration was extended into the subsequent reporting period until February 2022. The survey was executed by New Resolution Geophysics, a contractor based in RSA, along with their support team. Contact was made with all relevant farm owners within the EPL over which surveys were flown, and consent agreements were signed. In addition, farmers were informed 2 days prior to surveying over their farms in order to ensure that they were informed of the activities so as to remediate any immediate concerns that might arise. No issues were reported by the farmers.

##### 3.1.2.2 *January to June 2022*

The airborne electromagnetic (AEM) survey, for which a separate EMP was in place, was conducted from January to February 2022. The survey was executed by New Resolution Geophysics, a contractor based in RSA, along with their support team. All relevant farm owners within the EPL over which surveys were flown were contacted and consent agreements were signed prior to commencement of the survey. In addition, farmers were informed 2 days prior to surveying over their farms in order to ensure that they were informed of the activities so as to remediate any immediate concerns that might arise. No issues were reported by the farmers.

##### 3.1.2.3 *July to December 2022*

No activities were conducted on EPL 7730 during the reporting period. It is thus concluded that EMP compliance would therefore be in order for this EPL.

##### 3.1.2.4 *January to June 2023*

Fieldwork entailed utilising pre-existing access tracks and walking in areas inaccessible to vehicles. Soil sampling progressed into its fourth phase during the first and second quarters of 2023. Samples were gathered at designated global positioning system (GPS) points and sent to the ALS laboratory in Okahandja for geochemical analysis. The soil sampling techniques employed were non-invasive, eliminating the need for rehabilitation efforts.

3.1.2.5 July to December 2023

The second phase of the diamond drilling programme took place from May 21 to August 8, 2023, while the third phase occurred between October 12 and December 15, 2023. Diamond drilling was performed by Mitchell Drilling Namibia (Pty) Ltd on farm Moedersus (No.72) situated on the EPL. Samples were sent to ALS laboratory in Okahandja for geochemical analysis.

### 3.2 ENVIRONMENTAL MANAGEMENT PLAN AND AUDITING

The approved EMP covers all adverse environmental impacts, including any additional potential impacts that may result from the exploration activities on EPL 7730. The EMP provides the mitigation measures and monitoring requirements to curb the magnitude of impacts.

### 3.3 COMPLIANCE AUDIT FINDINGS

This section outlines the findings of environmental audits (desktop) during the period of review for EPL 7730. It addresses obligations in terms of the key Acts that govern the activities on site, the commitments made in the EMP and present the findings and recommended corrective actions where applicable (Table 2 **Error! Reference source not found.**).

The EMP therefore:

- Identifies all mineral exploration activities that could cause environmental damage (aspects and potential impacts) and provides a summary of actions required;
- Identifies institutions responsible for ensuring compliance with the EMP and provides their contact information;
- Provides standard procedures to avoid, minimise and mitigate the identified negative environmental impacts and to enhance the positive impact of the proposed activities on the environment;
- Provides for exploration site rules and actions required;
- Forms a written record of procedures, responsibilities, requirements and rules for contractor/s, their staff and any other person who must comply with the EMP;
- Ensures zero pollution incidents; minimal vegetation clearing and earthworks, protect local flora, fauna, and water resources; and use of water and other natural resources effectively and efficiently;
- Provides a monitoring and auditing programme to track and record compliance and identify and respond to any potential or actual negative environmental impacts;
- Provides a monitoring programme to record any mitigation measures that are implemented;
- Ensures that regular independent third-party environmental audits are carried out on a regular basis; and
- Once exploration has ceased, exploration sites require rehabilitation.

### 3.4 ISSUES OF NON-COMPLIANCE

There were no instances of environmental non-conformance identified during the review period.

## 4 EXPLORATION EMP COMPLIANCE AUDIT

This section (Table 2) provides an overview of the compliance with EMP requirements as depicted in the approved EMP for EPL 7730 (Appendix A) This EMP compliance section has been compiled based on information as provided by the Proponent.

**Table 2 – Exploration EMP compliance audit (EPL 7730).**

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
<b>Access and site preparation</b>	<ul style="list-style-type: none"> <li>- Miscommunication with the farm owners,</li> <li>- Disruption of farm operations (leaving gates open, loss of farming area, interference at water points)</li> <li>- Potential conflict with farm owners and neighbours (suspicious movement, poaching, stock theft, field fires, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure documented permission to enter farms is enforced,</li> <li>- Farmers should have access to all farm areas at all times,</li> <li>- Existing water points and feeding areas need to be left, unaffected,</li> <li>- Use existing roads for access to avoid new tracks and cut lines,</li> <li>- Compliance with all applicable laws and agreements.</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- The Proponent contacted/engaged the farmers within the EPL prior to exploration fieldwork.</li> <li>- Consent agreements were signed with the farmers within the EPL.</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
	<ul style="list-style-type: none"> <li>- Potential grievances and complaints,</li> <li>- Social discomfort and anxiety</li> </ul>	<ul style="list-style-type: none"> <li>- Develop and implement an environmental and social operation manual or procedures to work on private farms and implement monitoring programmes thereafter,</li> <li>- Maintain continuous communication with interested and affected parties (I&amp;APs) to identify concerns and mitigation measures,</li> <li>- Compliance with all applicable laws and agreements,</li> <li>- Train personnel and raise awareness to sensitize them about contentious issues such as stock theft and poaching,</li> <li>- Ensure appropriate supervision of all activities daily,</li> <li>- Accidents and incidents need to be reported to exploration manager and recorded in the incident register.</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Farmers were notified two (2) days prior to AEM surveying over their farms.</li> <li>- No issues or complaints were reported by the farmers.</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
General exploration activities	<ul style="list-style-type: none"> <li>Residing and nesting organisms can be disturbed, injured or killed by movement of vehicles and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Restrict movements to areas of activities only.</li> <li>Use existing tracks and routes as far as practically possible.</li> <li>Identify rare, endangered, threatened and protected species in advance such as the white or black rhino.</li> <li>Route new tracks around sensitive areas inhabited by protected species (i.e., pangolins, etc.).</li> <li>Restrict movements to daytime hours.</li> <li>Sensitize personnel by training and creating awareness amongst them and notify them to avoid some areas.</li> <li>No driving off designated access routes (into the bush) or any off-road.</li> <li>No animals or birds may be collected, caught, consumed or removed from site.</li> </ul>	<ul style="list-style-type: none"> <li>Compliant</li> </ul>	<ul style="list-style-type: none"> <li>The AEM surveys conducted were restricted to daytime hours. There were no movements on the ground due to the nature of these exploration activities.</li> <li>Induction and training is provided to the workers prior to drilling operations.</li> <li>Drilling activities conducted involve minimal vegetation clearing.</li> <li>No issues were reported by the farmers.</li> </ul>
	<ul style="list-style-type: none"> <li>Residing and nesting organisms can be disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Restrict excessive noise to areas of activities only.</li> <li>Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturdays).</li> </ul>	<ul style="list-style-type: none"> <li>Compliant</li> </ul>	<ul style="list-style-type: none"> <li>The AEM survey conducted were restricted to</li> </ul>



Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
	<p>as a result of ambient noise from operations and movements of vehicles and equipment</p> <ul style="list-style-type: none"> <li>- Conflict with farmers and neighbours about rising of ambient noise levels</li> </ul>	<ul style="list-style-type: none"> <li>- No activities are allowed between dusk and dawn.</li> <li>- Drill equipment shall be suitably positioned to ensure that noisy equipment is away from receptors.</li> <li>- Residents shall be provided at least two weeks' notice of drilling operations within 1 km of their property.</li> <li>- All equipment to be shut down or throttled back between periods of use.</li> <li>- Adhere to civil aviation regulations about the use of a drone, if necessary.</li> </ul>		<p>daytime hours.</p> <p>There were no ground movements due to the nature of these exploration activities.</p> <ul style="list-style-type: none"> <li>- Consent agreements were signed with the farmers and were notified two (2) days prior to exploration activities ( i.e. AEM surveying over their farm).</li> <li>- No complaints or issues were reported by the farmers.</li> </ul>
	<ul style="list-style-type: none"> <li>- Visual disturbances</li> </ul>	<ul style="list-style-type: none"> <li>- Position drill equipment and other heavy equipment in such a way that it is out of sight from human receptors.</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- The Proponent and contractors maintained good</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
		<ul style="list-style-type: none"> <li>- Barriers or fences shall be used if drilling occurs in locations that may affect residents or livestock.</li> <li>- Maintain good housekeeping standards on site.</li> <li>- Maintain continuous communication with I&amp;APs to identify concerns and mitigation measures.</li> </ul>		<p>housekeeping as no complaints were reported.</p> <ul style="list-style-type: none"> <li>- The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>
	<ul style="list-style-type: none"> <li>- Dust and emissions</li> </ul>	<ul style="list-style-type: none"> <li>- All vehicles and machinery or equipment to be shut down or throttled back between periods of use.</li> <li>- Use existing access roads and tracks where possible.</li> <li>- Apply dust suppression where possible.</li> <li>- Restrict the speed of vehicles (&lt;30 km/h).</li> <li>- Specific activities that may generate dust and impact on residents shall be avoided during high wind events.</li> <li>- Residents need to be informed at least two weeks in advance that drilling operations are within 1km of their property.</li> <li>- Vehicles and machinery are to be regularly serviced according to the manufacturers' specifications and kept in good working order so as to minimise exhaust emissions.</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Existing routes were used as feasibly possible.</li> <li>- Soil sampling activities conducted were invasive.</li> <li>- The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
	<ul style="list-style-type: none"> <li>- Loss of soil quality due to mixing of earth matter, trampling, compaction, and pollution,</li> <li>- Enhanced soil erosion</li> </ul>	<ul style="list-style-type: none"> <li>- Where possible, plan access routes, drill pads and camps outside of existing drainage lines,</li> <li>- Where necessary, install diversions to curb possible erosion,</li> <li>- Restore drainage lines when disturbed,</li> <li>- Topsoil should be stockpiled separately, and re-spread during rehabilitation,</li> <li>- Limit the possibility of compaction and creating of a hard subsurface,</li> <li>- Limit the possibility of trampling,</li> <li>- During drilling oil absorbent matting should be placed under and around the rig,</li> <li>- Equipment must be in a good condition to ensure that accidental oil spills do not occur and contaminate soil,</li> <li>- In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site,</li> <li>- Limit the possibility of mixing mineral waste with topsoil.</li> </ul>	- Compliant	<ul style="list-style-type: none"> <li>- The Proponent reported that small trenches created during soil sampling were rehabilitated post sampling.</li> <li>- No disturbances to drainage lines reported.</li> <li>- The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>
	<ul style="list-style-type: none"> <li>- Groundwater contamination</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure drill pads and spill kits are in place on site,</li> <li>- Consider alternative sites when the water table is too high,</li> <li>- Wastewater shall be contained,</li> <li>- Where possible, water from existing water sources shall be used.</li> </ul>	- Compliant	<ul style="list-style-type: none"> <li>- No potential incidences with potential to contaminate groundwater sources were reported.</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
				<ul style="list-style-type: none"> <li>- The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>
<p><b>Airborne EM survey (AEM) over the EPL, possible low flying, indication of line spacing</b></p>	<ul style="list-style-type: none"> <li>- Perceived impact from low-flying EM survey activities on livestock and humans.</li> </ul>	<ul style="list-style-type: none"> <li>- Prior to conducting aerial surveys, both directly and indirectly affected parties should be informed in writing at least 2 weeks prior,</li> <li>- The following information is to be included in the written communication sent to the interested and affected parties. This can be in the form of a Press Notice;               <ul style="list-style-type: none"> <li>o Company name,</li> <li>o Survey dates, time and duration,</li> <li>o Purpose of the survey,</li> <li>o Flight altitude,</li> <li>o Survey location, map of survey area and flight lines, and</li> <li>o Contact details for enquiries.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- The Proponent contacted the farmers within the EPL prior to AEM surveying over their farms.</li> <li>- Consent agreements were signed with farmers prior to the AEM surveys.</li> <li>- The farmers were notified two (2) days in advance prior to surveying over their farms.</li> <li>- High -resolution satellite images were provided as</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
				good will to each farmer whose property was included in the AEM survey.
<b>Vegetation clearance for access routes, drill pads and temporary contractor camps</b>	<ul style="list-style-type: none"> <li>- Loss of plant species</li> <li>- Loss of habitat</li> <li>- Create landscape scars</li> <li>- Enhance erosion</li> <li>- Loss of sense of place</li> </ul>	<ul style="list-style-type: none"> <li>- Use existing roads for access to avoid new tracks and cut lines,</li> <li>- Minimise clearance areas through proper planning of the exploration activities,</li> <li>- Route new tracks around established and protected trees, and clumps of vegetation,</li> <li>- Identify rare, endangered, threatened and protected species,</li> <li>- During toolbox talks and induction, highlight to workers that the removal of significant plants should be avoided,</li> <li>- Where possible rescue and relocate plants of significance,</li> <li>- Promote revegetation of cleared areas upon completion of exploration activities.</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Drilling activities conducted involved minimal vegetation clearing.</li> <li>- All field staff were always under supervision and informed of areas to be avoided on respective farms.</li> <li>- Site rehabilitation included levelling of any soil disturbed by the rig or support vehicle/equipment and redistribution of all vegetation that have been</li> </ul>



Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
				removed to encourage re-vegetation.
	<ul style="list-style-type: none"> <li>- Alien plants and weeds can accidentally be introduced</li> </ul>	<ul style="list-style-type: none"> <li>- All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (not present on the project site) should have an internal weed and seed inspection completed prior to equipment being used,</li> <li>- Ensure contractors receive induction on spread of alien weed,</li> <li>- Ensure the potential introduction and spread of alien plants is prevented,</li> <li>- Ensure the correct removal of alien invasive vegetation and prevent the establishment and spread of alien invasive plants,</li> <li>- Eradicate weeds and alien species as soon as they appear,</li> <li>- Make workers aware about alien species and weeds.</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Induction, training and toolbox talks were held with the team.</li> <li>- The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>
<b>Fuel handling and storage, maintenance on equipment,</b>	<ul style="list-style-type: none"> <li>- Soil contamination</li> <li>- Water contamination</li> <li>- Enhance accidental veld</li> </ul>	<b>Storage</b> <ul style="list-style-type: none"> <li>- Label chemicals appropriately,</li> <li>- Chemicals with different hazard symbols should not be stored together - clear guidance on the compatibility of different chemicals can be obtained</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- No non conformances or incidences were reported.</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
<p><b>machinery and vehicles</b></p> <p><b>Inadequate control or accidental releases of hazardous substances on site</b></p>	<p>fires during high wind periods</p>	<p>from the material safety data sheets (MSDS) which should be readily available,</p> <ul style="list-style-type: none"> <li>- Store chemicals in a dedicated, enclosed, and secure facility with a roof and concrete floor. Chemical tanks should be completely contained within secondary containment such as bunding,</li> <li>- Consider the feasibility of substituting hazardous chemicals with less hazardous alternatives,</li> <li>- Storage and handling of fuels and chemicals shall be in compliance with relevant legislation and regulations,</li> <li>- Fuels, lubricants, and chemicals are to be stored within appropriately sized, impermeable bunds or trays with a capacity not less than 110% of the total volume of products stored.</li> </ul> <p><b>Fire risk</b></p> <ul style="list-style-type: none"> <li>- No open fires are allowed to be lit by personnel, associated with the proponent anywhere on the EPL outside of dedicated campsites,</li> <li>- The proponent to ensure that exploration campsites have proper cooking facilities available to use. Gas stoves are the preferred option,</li> <li>- No cigarette butts are allowed to be discarded into the environment. These should be contained in</li> </ul>		<ul style="list-style-type: none"> <li>- No hazardous chemicals are stored on-site.</li> <li>- No large spills noted.</li> <li>- Fire extinguishers utilised all serviced and valid.</li> <li>- The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
		<p>appropriate domestic containment bins and disposed of at the local landfill site,</p> <ul style="list-style-type: none"> <li>- No unauthorised movement beyond the exploration areas and campsites is allowed,</li> <li>- Proper fire hazard identification signage to be placed in areas that store flammable material (e.g., hydrocarbons and gas bottles),</li> <li>- Control and reduce the potential risk of fire by segregating and safe storage of materials,</li> <li>- Avoid potential sources of ignition by prohibiting smoking in and around facilities,</li> <li>- Fire extinguishers should always be at designated areas and should be inspected regularly.</li> </ul> <p><b>Spills</b></p> <ul style="list-style-type: none"> <li>- Spill kits with the following items as a minimum should be made available on site: <ul style="list-style-type: none"> <li>o Absorbent materials,</li> <li>o Shovels,</li> <li>o Heavy-duty plastic bags,</li> <li>o Protective clothing (e.g., gloves and overalls),</li> </ul> </li> <li>- Major servicing of equipment shall be undertaken offsite or in appropriately equipped workshops,</li> </ul>		

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
		<ul style="list-style-type: none"> <li>- For small repairs and unavoidable and necessary maintenance activities all reasonable precautions to avoid oil and fuel spills must be taken (i.e., spill trays, impervious sheets),</li> <li>- Provision of adequate and frequent training on spill management, spill response and refuelling must be provided to all onsite personnel,</li> <li>- No refuelling is to take place within 50 meters of groundwater boreholes, surface water or streams.</li> <li>- Vehicles and machinery are to be regularly serviced to minimise oil and fuel leaks,</li> <li>- All major petroleum product spills (spill of more than 200 litres per spill) should be reported to the Ministry of Mines and Energy (MME) on Form PP/11 titled "Reporting of major petroleum product spill", attached as Appendix B.</li> </ul> <p><b>The following points therefore apply to all areas on the site:</b></p> <ul style="list-style-type: none"> <li>- Assess the situation for potential hazards,</li> <li>- Do not come into contact with the spilled substance until it has been characterised and necessary personal protective equipment (PPE) is provided,</li> <li>- Isolate the area as required.</li> </ul>		

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
		<p><b>The following measures are to be implemented in response to a spill:</b></p> <ul style="list-style-type: none"> <li>- Spills are to be stopped at source as soon as possible (e.g. close valve or upright drum),</li> <li>- Spilt material is to be contained to the smallest area possible using a combination of absorbent material, earthen bunds or other containment methods,</li> <li>- Spilt material is to be recovered as soon as possible using appropriate equipment. In most cases, it will be necessary to excavate the underlying soils until clean soils are encountered,</li> <li>- All contaminated materials recovered subsequent to a spill, including soils, absorbent pads and sawdust, are to be disposed to appropriately licensed facilities,</li> <li>- A written incident report must be submitted to the general manager.</li> </ul>		
<p><b>Generation of waste</b></p>	<ul style="list-style-type: none"> <li>- Soil contamination</li> <li>- Water contamination</li> <li>- Nuisance (visual impacts, litter)</li> <li>- Ecological risks</li> </ul>	<ul style="list-style-type: none"> <li>- Good housekeeping standards applied on site,</li> <li>- Training and raise awareness through toolbox talks and induction,</li> <li>- Implement a standard operational procedure (SOP) on waste management, from all kinds of waste possible on-site (e.g. hydrocarbons, domestic, wastewater),</li> <li>- Implement a culture of correct waste collection, waste segregation and waste disposal,</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Toolbox talks are provided by the drilling company foreman prior to the start of exploration activities.</li> <li>- An SOP is in place.</li> </ul>

Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
		<p>complimentary to the waste hierarchy – avoid, re-use, recycle,</p> <ul style="list-style-type: none"> <li>– Wastewater discharges will be contained – no disposal of wastewater directly into the environment is allowed.</li> </ul>		<ul style="list-style-type: none"> <li>– Solid waste was collected on-site and disposed of at the Gobabis landfill site.</li> <li>– No issues, complaints or non-conformances were reported.</li> <li>– The Proponent is to ensure compliance with the requirements of the EMP.</li> </ul>
<b>Water use</b>	<ul style="list-style-type: none"> <li>– Soil contamination</li> <li>– Ground and surface water contamination</li> <li>– Nuisance (visual and odour)</li> </ul>	<ul style="list-style-type: none"> <li>– Minimise the operational consumption of water throughout the operations of the project,</li> <li>– Visual monitoring and photographic record should be kept of any surface and / or groundwater intersected,</li> <li>– Recycle wastewater, where possible,</li> <li>– Install devices to prevent spills and overfills, e.g. shutoff devices for large volume tanks (e.g. &gt; than 2000 L),</li> <li>– Install an impermeable hardstand in areas of high-risk contamination to prevent ground infiltration by pollutants,</li> </ul>	<ul style="list-style-type: none"> <li>– Compliant</li> </ul>	<ul style="list-style-type: none"> <li>– No non-conformances reported.</li> <li>– The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>



Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
		<ul style="list-style-type: none"> <li>- Segregation of wastewater (domestic and industrial effluent),</li> <li>- During operations, monitoring of wastewater discharges (specific to a wastewater discharge permit conditions) should be conducted on a regular basis (quarterly).</li> </ul>		
<b>Heritage</b>	<ul style="list-style-type: none"> <li>- Disruption of heritage sites</li> </ul>	<p>In case of discovering or unearthing heritage sites, particularly palaeontological or archaeological finds, the following measures (chance find procedure) shall be applied:</p> <ul style="list-style-type: none"> <li>- Work to cease, area to be demarcated with appropriate tape by the site supervisor, and the site manager to be informed,</li> <li>- The site manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and inform the environment and social manager with the GPS position if possible,</li> <li>- If works cannot proceed without damage to findings, the site manager to inform the environmental manager who will get in touch with an archaeologist who will provide advice,</li> <li>- Exploration manager or archaeological specialist to evaluate the significance of the remains and identify appropriate action, for example, record and remove;</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- No non-conformances were observed.</li> <li>- A chance find procedure implemented If required.</li> <li>- The Proponent to comply with conditions of the EMP.</li> </ul>

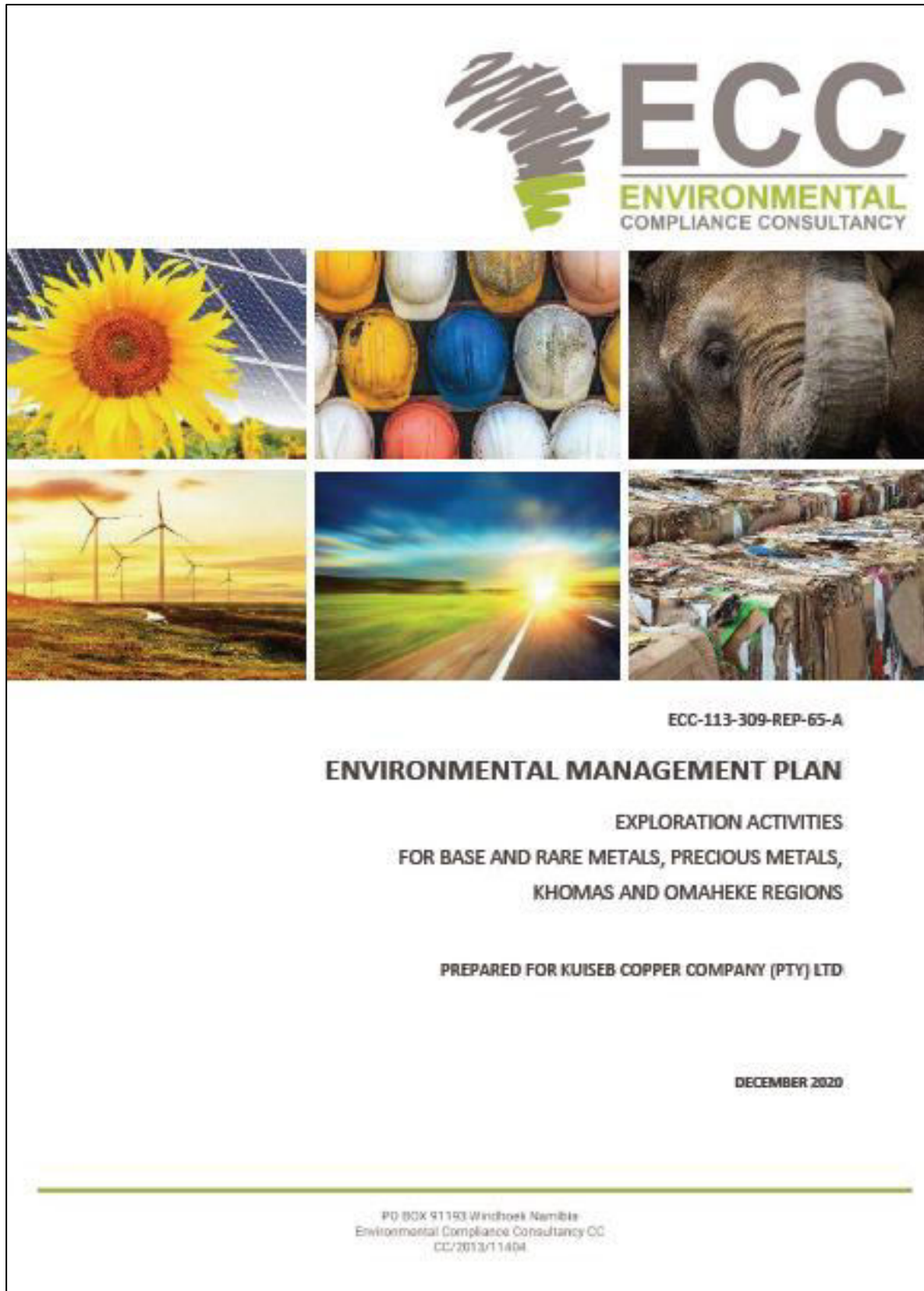
Activity	Potential impacts	Management/mitigation measures	Compliance	Comments
		<ul style="list-style-type: none"> <li>relocate or leave in situ (depending on the nature and value of the remains)</li> <li>- Inform the police if the remains are human, and</li> <li>- Obtain appropriate clearance or approval from the competent authority, if required, and recover and remove the remains to the national museum or national forensic laboratory as directed.</li> </ul>		
<p><b>Job creation, skills development and business opportunities</b></p>	<ul style="list-style-type: none"> <li>- Beneficial socio-economic impacts on a local and regional scale</li> </ul>	<ul style="list-style-type: none"> <li>- Maximise local employment and local business opportunities,</li> <li>- Enhance the use of local labour and local skills as far as reasonably possible,</li> <li>- Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.</li> </ul>	<ul style="list-style-type: none"> <li>- Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Evidence of local employment and local business opportunities.</li> <li>- The Proponent to ensure compliance with the requirements of the EMP.</li> </ul>

## **5 CONCLUSION**

During the review period, fieldwork activities encompassed soil sampling, diamond drilling, and the second phase of the AEM survey.

All operations conducted on the EPL adhered to the stipulated conditions and regulations of the granted licence, as outlined in the environmental management plan (EMP). It is advised that the Proponent maintain strict compliance with environmental laws and internal standards to uphold optimal environmental protection throughout the Project's advancement. Furthermore, it is recommended that an independent environmental assessment practitioner conducts on-site audits on EPL 7730 activities bi-annually and annually.

# APPENDIX A – EXPLORATION ENVIRONMENTAL MANAGEMENT PLAN FOR EPL 7730



# APPENDIX B – EPL 7730 ENVIRONMENTAL CLEARANCE CERTIFICATE

ECC – 01411	Serial: E7vz831411
	
<p><b>REPUBLIC OF NAMIBIA</b> <b>MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM</b> OFFICE OF THE ENVIRONMENTAL COMMISSIONER</p>	
<p><b>ENVIRONMENTAL CLEARANCE CERTIFICATE</b> <b>ISSUED</b></p>	
<p>In accordance with Section 37(2) of the Environmental Management Act (Act No. 7 of 2007)</p>	
<p>TO</p>	
<p><b>Kuseib Copper Company (Pty) Ltd</b> <b>P O Box 2055, Swakopmund</b></p>	
<p><b>TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY</b></p>	
<p><b>Exploration activities on EPL 7730 for base and rare metals, precious metals, Khomas Region</b></p>	
<p>Issued on the date: <b>2021-06-08</b> Expires on this date: <b>2024-06-08</b></p>	 <p><b>ENVIRONMENTAL COMMISSIONER</b> OFFICE OF THE ENVIRONMENTAL COMMISSIONER REPUBLIC OF NAMIBIA</p>
<p>(See conditions printed over leaf)</p>	
<p>This certificate is printed without erasures or alterations</p>	
	

ECC –

**CONDITIONS OF APPROVAL**

1. This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office
2. This certificate does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from these activities. Instead, full accountability rests with the proponent and its consultants
3. This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project
4. All applicable and required permits are obtained and mitigation measures stipulated in the EMP are applied particularly with respect to management of ecological impacts.
5. Strict compliance with national heritage guidelines and regulations is expected throughout the life-span of the proposed activity, therefore any new archaeological finds must be reported to the National Heritage Council for appropriate handling of such.
6. A six monthly report on project progress and environmental management profile, starting from date of commencement of operations, must be submitted by the Proponent to Office of Environmental Commissioner.



## APPENDIX C – BI-ANNUAL ENVIRONMENTAL REPORTS 2021 - 2023



**ECC**  
**ENVIRONMENTAL**  
COMPLIANCE CONSULTANCY



ECC-113-309-REP-65-A

## **ENVIRONMENTAL MANAGEMENT PLAN**

EXPLORATION ACTIVITIES  
FOR BASE AND RARE METALS, PRECIOUS METALS,  
KHOMAS AND OMAHEKE REGIONS

PREPARED FOR KUISEB COPPER COMPANY (PTY) LTD

DECEMBER 2020

## TITLE AND APPROVAL PAGE

<b>Project Name:</b>	Environmental management plan for the exploration activities on EPLs of Kuiseb Copper Company (Pty) Ltd and Rio Tinto Mining and Exploration Ltd, in partnership, for base and rare metals, precious metals in the Khomas and Omaheke regions.
<b>Project Number:</b>	ECC-113-309-REP-65-A
<b>Client Name:</b>	Kuiseb Copper Company (Pty) Ltd
<b>Ministry Reference:</b>	N/A
<b>Status of Report:</b>	Submission to the government
<b>Date of issue:</b>	December 2020
<b>Review Period</b>	N/A

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### Confidentiality

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

## TABLE OF CONTENTS

<b>1 INTRODUCTION .....</b>	<b>6</b>
1.1 BACKGROUND TO THE PROPOSED PROJECT .....	6
1.2 ENVIRONMENTAL REGULATORY REQUIREMENTS .....	8
1.3 PURPOSE AND SCOPE OF THIS REPORT.....	8
1.4 MANAGEMENT OF THIS EMP .....	8
1.5 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THIS EMP .....	8
1.6 ENVIRONMENTAL CONSULTANCY.....	9
<b>2 PROJECT MANAGEMENT PERSONNEL .....</b>	<b>10</b>
2.1 ORGANISATIONAL STRUCTURE, ROLES AND RESPONSIBILITIES.....	10
2.2 CONTRACTORS .....	11
2.3 EMPLOYMENT .....	11
<b>3 COMMUNICATION AND TRAINING .....</b>	<b>12</b>
3.1 COMMUNICATIONS.....	12
3.2 ENVIRONMENTAL EMERGENCY AND RESPONSE.....	12
3.3 COMPLAINTS HANDLING AND RECORDING .....	12
3.4 TRAINING AND AWARENESS .....	13
3.4.1 SITE INDUCTION .....	13
<b>4 REPORTING, COMPLIANCE AND ENFORCEMENT .....</b>	<b>14</b>
4.1 ENVIRONMENTAL INSPECTIONS AND COMPLIANCE MONITORING.....	14
4.1.1 DAILY COMPLIANCE MONITORING.....	14
4.1.2 MONTHLY COMPLIANCE MONITORING.....	14
4.1.3 REPORTING .....	14
4.2 ENVIRONMENTAL PERMITS.....	14
4.3 NON-COMPLIANCE.....	14
4.3.1 NON-COMPLIANCE EVENT .....	14
4.4 INCIDENT REPORTING .....	15
4.4.1 DISCIPLINARY ACTION .....	15
<b>5 ENVIRONMENTAL AND SOCIAL MANAGEMENT .....</b>	<b>16</b>
5.1 ENVIRONMENTAL PERFORMANCE MEASUREMENT .....	16
5.2 OBJECTIVES AND TARGETS.....	16
5.3 REGISTER OF ENVIRONMENTAL RISKS AND ISSUES .....	16
<b>6 IMPLEMENTATION OF THE EMP.....</b>	<b>26</b>
<b>7 APPENDIX A: APPLICATION FOR A WASTEWATER DISCHARGE LICENCE.....</b>	<b>27</b>

8	APPENDIX B - REPORTING OF MAJOR PETROLEUM PRODUCT SPILL FORM PP/11 .....	34
9	APPENDIX C - COMPLAINTS REGISTER TEMPLATE .....	36
10	APPENDIX D - MONTHLY INTERNAL COMPLIANCE CERTIFICATE .....	37

**LIST OF TABLES**

TABLE 1 - ROLES AND RESPONSIBILITIES.....	10
TABLE 2 - EMERGENCY CONTACT DETAILS .....	12
TABLE 3 - ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES .....	17

**LIST OF FIGURES**

FIGURE 1 - LOCATION OF KUISEB COPPER COMPANY EPLS.....	7
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## DEFINITIONS AND ABBREVIATIONS

ECC	Environmental Compliance Consultancy
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
EPL	Exclusive Prospecting Licence
I&AP	Interested and Affected Parties
KCC	Kuiseb Copper Company
MEFT	Ministry of Environment, Forestry, and Tourism
MME	Ministry of Mines and Energy
MSDS	Safety Data Sheets
RT	Rio Tinto
SOP	Standard Operating Procedure
GPS	Geographical Positioning System
AEM	Airborne Electromagnetic



# 1 INTRODUCTION

## 1.1 BACKGROUND TO THE PROPOSED PROJECT

Environmental Compliance Consultancy (ECC) has been engaged by the proponent Kuiseb Copper Company (Pty) Ltd to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, No. 7 of 2007 and its regulations. An application for an environmental clearance certificate was submitted to the relevant competent authorities, the Ministry of Mines and Energy (MME) and the Ministry of Environment, Forestry and Tourism (MEFT).

Kuiseb Copper Company (Pty) Ltd (KCC) and Rio Tinto Mining and Exploration Ltd (RT), through a formal KCC-RT Joint Venture agreement, permits KCC to fully operate the exploration program. The proponent intends to conduct exploration activities for base, rare and precious metals in the Khomas and Omaheke regions in the general vicinity of the Gobabis, Witvlei and Doringveld areas of eastern Namibia (Figure 1). The exploration programme may include an airborne electromagnetic survey (non-invasive, at a coarse line spacing) over smaller portions of the combined EPL licence area. Additional exploration methods may include soil and rock-chip sampling, geological mapping and ground geophysical surveys, followed by drilling in selected target areas.

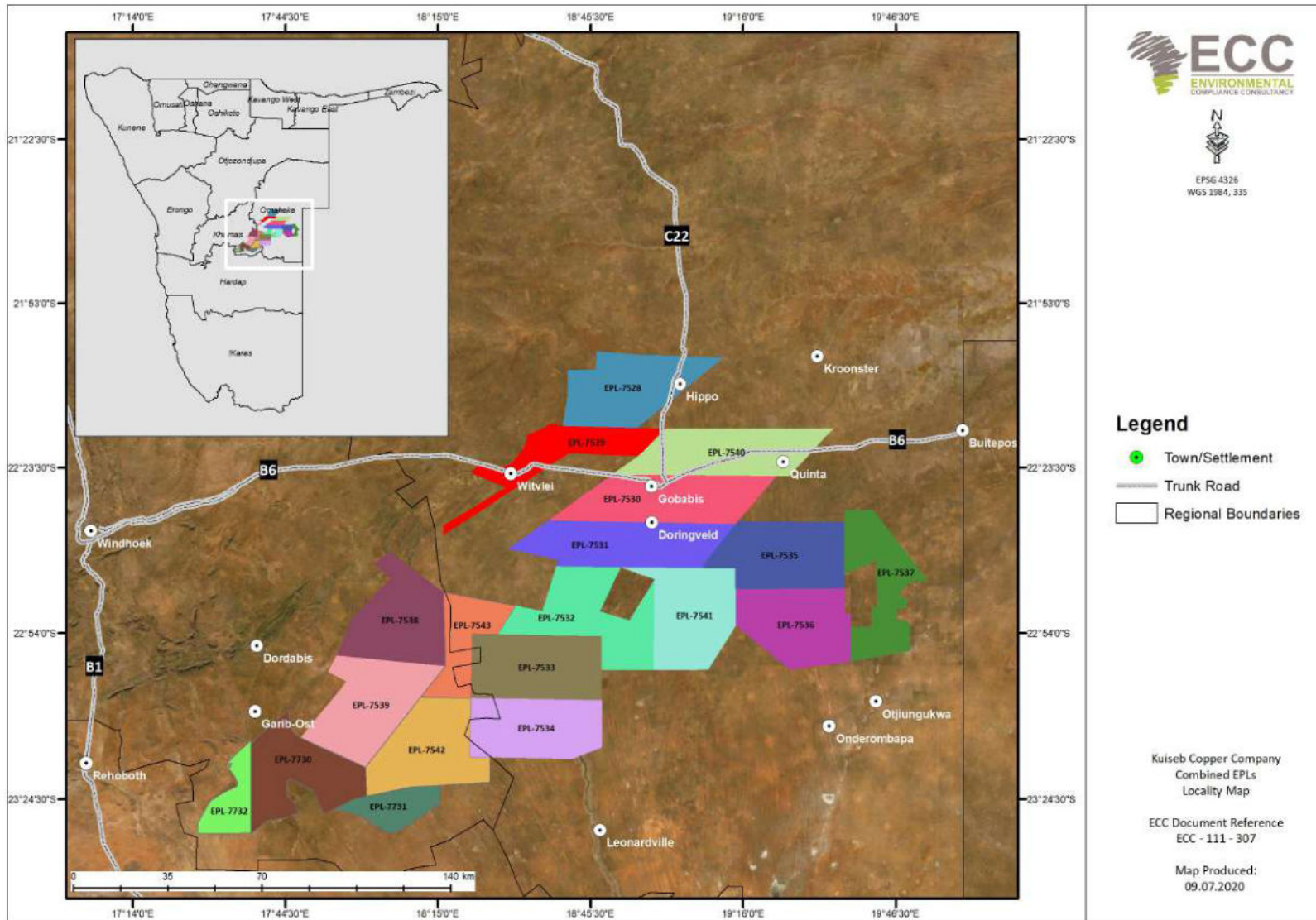


FIGURE 1 - LOCATION OF THE KUISEB COPPER COMPANY AND RIO TINTO MINING AND EXPLORATION JOINT VENTURE EPLs  
DECEMBER 2020

## 1.2 ENVIRONMENTAL REGULATORY REQUIREMENTS

The proposed project is considered as a listed activity as stipulated in the Environmental Management Act, No. 7 of 2007 and the Environmental Impact Assessment Regulation, No. 30 of 2012. As a listed activity an application for an environmental clearance certificate is required. An environmental scoping report and EMP are required as part of the environmental clearance certificate application, as well as to support the decision-making process. This report presents the EMP and has been undertaken in accordance with the requirements of the Environmental Management Act, No. 7 of 2007 and its regulations.

## 1.3 PURPOSE AND SCOPE OF THIS REPORT

This EMP provides a logical framework, proposed mitigation measures and management strategies for the exploration activities associated with the proposed project. In this way ensuring that the potential environmental and social impacts are mitigated and minimised as far as practically possible and that statutory and other legal obligations are adhered to and fulfilled. Outlined in the EMP are the protocols, procedures and roles and responsibilities to ensure the management arrangements are effectively and appropriately implemented.

This EMP forms an appendix to the environmental scoping report and was based on the findings of the assessment; therefore, the environmental scoping report should be referred to for further information on the proposed project, assessment methodology, applicable legislation, and assessment findings.

This EMP is a live document and shall be reviewed at predetermined intervals, and updated when the scope of works alters, or when further data or information can be added. All personnel working on the project will be legally required to comply with the standards set out in this EMP.

The scope of this EMP includes all activities carried out during the exploration stage in search of base and rare metals, precious metals on EPLs 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.

## 1.4 MANAGEMENT OF THIS EMP

The proponent Kuiseb Copper Company (Pty) Ltd will hold the environmental clearance certificate for the proposed project and shall be responsible for the implementation and management of this EMP. The implementation and management of this EMP and thus the monitoring of compliance shall be undertaken through daily duties and activities as well as by monthly inspections.

This EMP shall be circulated to all contractors and made available on ECC's website.

## 1.5 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THIS EMP

This EMP does not include measures for compliance with statutory occupational health and safety requirements. This will be provided in the safety management plan to be developed by the proponent.

Where there is any conflict between the provisions of this EMP and any contractor's obligations under their respective contracts, including statutory requirements (such as licences, project approval conditions, permits, standards, guidelines and relevant laws), the contract and statutory requirements are to take precedence.

The information contained in this EMP has been based on the project description as provided in the environmental assessment report. Where the design or exploration methods alter, this EMP may require updating and potential further assessment undertaken.

## 1.6 ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy, a Namibian consultancy with registration number CC/2013/11401, has prepared this document on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa in the public and private sector. The CV's of the authors of this report are contained in Appendix A. ECC is independent of the proponent and has no vested or financial interest in the proposed project except for fair remuneration of professional services rendered.

All compliance and regulatory requirements regarding this document should be forwarded by email or post to the following address:

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## 2 PROJECT MANAGEMENT PERSONNEL

### 2.1 ORGANISATIONAL STRUCTURE, ROLES AND RESPONSIBILITIES

The proponent shall be responsible for:

- Ensuring all members of the project team, including contractors comply with the procedures set out in this EMP;
- Ensuring that all personnel are provided with sufficient training, supervision, and instruction to fulfil this requirement; and
- Ensuring that any persons allocated specific environmental management responsibilities are notified of their appointment and confirm, in writing, that their responsibilities are clearly understood.

Contractors shall be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this EMP, and meet the responsibilities listed above. The key personnel and environmental responsibilities of each role through the project life are presented in Table 1.

**TABLE 1 - ROLES AND RESPONSIBILITIES**

ROLE	RESPONSIBILITIES & DUTIES
<b>Proponent</b>	<ul style="list-style-type: none"> <li>- Overall responsibility for the implementation and management of this EMP;</li> <li>- Ensure the environmental policy is communicated to all personnel throughout the proposed project and ensure that employees, contractors and visitors understand and adhere to the EMP;</li> <li>- Responsible for providing the required resources (including financial and technical) to complete the required tasks;</li> <li>- Appoint supervisors such as an exploration (project) manager and a site manager; and</li> <li>- Ensure that all employees, contractors and visitors are inducted on safety measures.</li> </ul>
<b>Exploration Manager</b>	<ul style="list-style-type: none"> <li>- Responsible for ensuring compliance with this EMP including overseeing all day-to-day activities throughout the duration of the project, including routine and non-routine maintenance works, as well as the decommissioning of the project;</li> <li>- Ensure adequate resources are made available for the implementation of this EMP;</li> <li>- Responsible for the management, utilisation and possible future revisions of this EMP;</li> <li>- Ensure all personnel are aware of the commitments made in this EMP and any other relevant regulatory requirements applicable to the project;</li> <li>- Ensure all employees and contractors participate in a site induction process prior to commencing with work on the project;</li> <li>- Maintain the community issues and concern register, and keep records of complaints received;</li> <li>- Ensure that best environmental practice is undertaken throughout the duration of the project; and</li> <li>- Report any non-compliance or accidents to the regulatory authority.</li> </ul>
<b>Site Manager (or nominated supervisor)</b>	<ul style="list-style-type: none"> <li>- Ensure that all employees, contractors and visitors to the site are conversant with the requirements of this EMP, relevant to their roles on site and adhere to this EMP at all times;</li> <li>- Provide environmental awareness or management training and site inductions for all employees, contractors and visitors;</li> <li>- Monitor daily operations and ensure adherence by personnel to the EMP;</li> <li>- Receive, respond to and record complaints; and</li> <li>- Report any non-compliance or accidents to the exploration manager.</li> </ul>

<p><b>Employees (and contractors and visitors where applicable)</b></p>	<ul style="list-style-type: none"> <li>- Responsible for being compliant with this EMP throughout the project;</li> <li>- Adhere to this EMP at all times;</li> <li>- Ensure attendance of site inductions;</li> <li>- Ensure appropriate briefings for certain activities have been provided and are fully understood; and</li> <li>- Report any operations and conditions that deviate from the EMP or any non-compliant issues or accidents to the site manager and exploration manager.</li> </ul>
---	--

## 2.2 CONTRACTORS

Any contractors hired during the exploration activities or for any accessory works for the project, or contractors appointed for maintenance activities, shall be compliant with this EMP, and shall be responsible for the following:

- Undertaking activities in accordance with this EMP as well as relevant policies, procedures, management plans, statutory requirements, and contract requirements;
- Implementing appropriate environmental management measures;
- Reporting of environmental issues, including actual or potential environmental incidents and hazards, to the exploration manager;
- Ensuring appropriate corrective or remedial action is taken to address all environmental hazards and incidents reported; and
- Adhere to the safety management plan developed by the proponent.

## 2.3 EMPLOYMENT

The proponent (and all contractors) shall comply with the requirements of the national regulations for Labour, health and safety and any amendments to these regulations. The following shall be complied with:

- In liaison with local government, community, stakeholders and relevant authorities the proponent shall ensure that local people have access to information about job opportunities and are considered first for exploration or maintenance contract employment positions;
- The number of job opportunities shall be made known together with the associated skills and qualifications;
- The maximum length of time the job is likely to last for shall be clearly indicated;
- Foreign workers with no proof of permanent legal residence shall not be hired; and
- Every effort shall be made to recruit from the pool of unemployed workers living in the local area for labour positions.



### 3 COMMUNICATION AND TRAINING

In order to ensure that potential risks and impacts are minimised, it is vital that personnel are appropriately informed and trained on operational procedures that include the above mitigation measures. It is also important that regular communications are maintained with all the stakeholders and that they are made aware of potential impacts and how to minimise or avoid them. This section sets out the framework for communication and training in relation to the EMP.

#### 3.1 COMMUNICATIONS

During exploration, the exploration manager or the site manager shall communicate all environmental issues to the project team through the following means (as and when required):

- Site induction;
- Audits and site inspections;
- Toolbox talks, including instruction on incident response procedures; and
- Briefings on key project-specific environmental issues.

This EMP shall be distributed to the exploration team including any contractors and personnel working on the exploration site to ensure that the environmental requirements are adequately communicated. Key activities and environmentally sensitive operations shall be briefed to workers and contractors in advance.

During the exploration activities, communication between the management team shall include discussing any complaints received and actions to resolve them, any inspections, audits or non-conformance with this EMP, and any objectives or target achievements.

#### 3.2 ENVIRONMENTAL EMERGENCY AND RESPONSE

Table 2 contains a list of numbers to be contacted in case of an emergency. All personnel will be made aware of these numbers.

**TABLE 2 - EMERGENCY CONTACT DETAILS**

TOWN	AMBULANCE	POLICE	FIRE BRIGADE
Gobabis	+ 264 62 56 6200	+264 62 57 7700	+264 (62) 56-6666
Witvlei	+264 (62) 56-2275	+264 (62) 1-0111	-
Leonardville	+264 (62) 56-2275	+264 (62) 56-9703	+264 (62) 56-9115
Rehoboth	+264 (62) 52-3811	+264 62 523 223	+264 (62) 52-2091

#### 3.3 COMPLAINTS HANDLING AND RECORDING

Any complaints received verbally by any personnel on the project site shall be recorded by the site manager or the receiver, including the name and contact details of the complainant, date and time of the complaint, and the nature of the complaint. The information shall be given to the exploration manager who is responsible for the overall management of complaints and will provide a written response to the complainant. The site manager shall inform the exploration manager of issues, concerns or complaints in a timely manner. It is the duty of both the site manager and exploration manager to maintain a complaint register that details the name of the complainant, date and time of the complaint and action taken to resolve the issues.

The workforce shall be informed about the complaints register, its location and the person responsible, in order to refer residents or the general public who wish to lodge a complaint. The complainant shall be informed in writing of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons why are to be recorded in the register.

The complaints register shall be kept for the duration of the project and will be available for government or public review upon request.

### 3.4 TRAINING AND AWARENESS

All personnel working on the project shall be competent to perform tasks that have the potential to cause an environmental impact. Competence is defined in terms of appropriate education, training, and experience.

#### 3.4.1 SITE INDUCTION

All personnel involved in the project shall be inducted to the site with a specific environment and social awareness training component. The environment and social awareness training shall ensure that personnel are familiar with the principles of this EMP, the environment and social aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

The exploration manager shall ensure an up-to-date register of completed training is maintained.

The site induction should include, but not limited to the following:

- A general site-specific induction that outlines:
  - o What is meant by “environment” and “social”;
  - o Why the environment needs to be protected and conserved;
  - o How exploration activities can impact on the environment; and
  - o What can be done to mitigate against such impacts.
- The inductee’s role and responsibilities with respect to implementing the EMP;
- The site’s environmental rules;
- Details of how to deal with, and who to contact if environmental problems occur;
- Basic vegetation clearing principals and species ID sheets;
- Noise control measures for drilling in proximity to residents;
- Focal themes such as compliance, reporting of accidents and incidents, good housekeeping and standard procedures for waste management;
- The potential consequences of non-compliance with this EMP and relevant statutory requirements; and
- The role of people responsible for the project.

## 4 REPORTING, COMPLIANCE AND ENFORCEMENT

### 4.1 ENVIRONMENTAL INSPECTIONS AND COMPLIANCE MONITORING

#### 4.1.1 DAILY COMPLIANCE MONITORING

A copy of this EMP shall be on site throughout the project and shall be available upon request. It is the responsibility of the exploration manager to ensure this EMP is complied with through their daily roles. Daily, weekly and monthly inspections will be undertaken. Any environmental problems or risks identified shall be reported to the exploration manager and actioned as soon as is reasonably practicable.

#### 4.1.2 MONTHLY COMPLIANCE MONITORING

Monthly inspections shall be undertaken by the exploration manager to check that the standards and procedures as set out in this EMP are being complied with and pollution control measures are in place and working correctly. Any non-conformance shall be recorded, including the following details: a brief description of non-conformance, the reason for the non-conformance, the responsible party, the result (consequence), and the corrective action to be taken and any necessary follow up measures required.

#### 4.1.3 REPORTING

There shall be a requirement to ensure that any incident or non-compliance, including any environmental issue, failure of equipment or an accident, is reported to the exploration manager in a timely manner.

### 4.2 ENVIRONMENTAL PERMITS

Whilst the Water Resources Management Act, No. 11 of 2013 is not enforced, it is best practice to adhere to its stipulations while ensuring compliance with the Water Act, No. 54 of 1956, which is still maintained.

Should water not be sourced directly from a private borehole or from a local Municipal source, a licence to abstract water is required in terms of the Water Act, No. 54 of 1956 and shall operate in accordance with any conditions of the licence.

In the event that vegetation is to be cleared all requirements under the Forest Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005 and its regulations of 2015 will be complied with.

### 4.3 NON-COMPLIANCE

#### 4.3.1 NON-COMPLIANCE EVENT

Where it has been identified that works are not compliant with this EMP, the exploration manager shall employ corrective actions so that the works return to being compliant as soon as possible. In instances where the requirements of the EMP are not upheld, a non-conformance and corrective action notice shall be produced. The notice shall be generated during the inspections and the exploration manager shall be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

A non-compliance event or situation, for example, is considered if:

- There is evidence of a contravention of this EMP and associated indicators or objectives;
- The exploration manager or contractor have failed to comply with corrective or other instructions issued by the exploration manager or qualified authority; or
- The exploration manager or contractor fails to respond to complaints from the public.

Activities shall be stopped in the event of serious non-compliance until corrective action(s) has been completed.

#### 4.4 INCIDENT REPORTING

The exploration manager must ensure that an accident and incident (including minor or a near-miss) reporting system is maintained so that all applicable statutory requirements are covered. For any serious incident involving a fatality, or permanent disability, the incident scene must be left untouched until witnessed by a representative of the police. This requirement does not preclude immediate first aid being administered and the location being made safe.

The exploration manager must investigate the cause of all work accidents and significant incidents and must provide the results of the investigation and recommendations on how to prevent a recurrence of such incidents. A formal root-cause investigation process should be followed.

##### 4.4.1 DISCIPLINARY ACTION

This EMP is a legally binding document and non-compliance with it shall result in disciplinary action being taken against the perpetrator(s). Such action may take the form of (but is not limited to):

- Fines or penalties;
- Legal action;
- Monetary penalties imposed by the proponent on the contractor;
- Withdrawal of licence(s); and
- Suspension of work.

The disciplinary action shall be determined according to the nature and extent of the transgression or non-compliance, and penalties are to be weighed against the severity of the incident.

## 5 ENVIRONMENTAL AND SOCIAL MANAGEMENT

### 5.1 ENVIRONMENTAL PERFORMANCE MEASUREMENT

This chapter provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible roles. This register will be subject to regular review by the exploration manager and updated when necessary.

The exploration manager or the site manager (if applicable) will use this register to undertake monthly inspections (see next section) to ensure the project is compliant with this EMP.

### 5.2 OBJECTIVES AND TARGETS

Environmental objectives for the project are as follows:

- Zero pollution incidents;
- Minimal vegetation clearing and earthworks;
- Protect local flora and fauna;
- Minimise the generation of waste; and
- Minimal interruption to farm activities.

### 5.3 REGISTER OF ENVIRONMENTAL RISKS AND ISSUES

An environmental review of the proposed project was completed which identified all the commitments and agreements made within the environmental assessment report. From this, a schedule of environmental commitments and risks has been produced (Table 3), which details deliverables including measures identified for the prevention of pollution or damage to the environment during exploration.

Table 3 provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible person. This register will be subject to regular review by the exploration manager and updated when necessary. The exploration manager will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.

TABLE 3 - ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
<b>Access and site preparation</b>	<ul style="list-style-type: none"> <li>- Miscommunication with the farm owners;</li> <li>- Disruption of farm operations (leaving gates open, loss of farming area and interference at water points); and</li> <li>- Potential conflict with farm owners and neighbours (suspicious movement, and poaching, stock theft, field fires, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure documented permission to enter farms is enforced;</li> <li>- Farmers should have access to all farm areas at all times;</li> <li>- Existing water points and feeding area need to be left unaffected;</li> <li>- Use existing roads for access to avoid new tracks and cut lines; and</li> <li>- Compliance with all applicable laws and agreements.</li> </ul>	Daily	Exploration manager or site manager (or nominated site supervisor)
	<ul style="list-style-type: none"> <li>- Potential grievances and complaints; and</li> <li>- Social discomfort and anxiety.</li> </ul>	<ul style="list-style-type: none"> <li>- Develop and implement an environmental and social operation manual or procedures to work on private farms and implement monitoring programmes thereafter;</li> <li>- Maintain continuous communication with I&amp;APs to identify concerns and mitigation measures;</li> <li>- Compliance with all applicable laws and agreements;</li> <li>- Train personnel and raise awareness to sensitize them about contentious issues such as stock theft and poaching;</li> <li>- Ensure appropriate supervision of all activities daily; and</li> <li>- Accidents and incidents need to be reported to the exploration manager and recorded in the incident register.</li> </ul>	Weekly, monthly	
<b>General on-ground exploration activities</b>	Residing and nesting organisms can be disturbed, injured or killed by the movement of vehicles and equipment.	<ul style="list-style-type: none"> <li>- Restrict movements to areas of activities only;</li> <li>- Use existing tracks and routes as far as practically possible;</li> <li>- Identify rare, endangered, threatened and protected species in advance such as the white or black rhino;</li> <li>- Route new tracks around sensitive areas inhabited by protected species (i.e., pangolins, etc.);</li> <li>- Restrict movements to daytime hours;</li> <li>- Sensitize personnel by training and creating awareness amongst them and notify them to avoid some areas;</li> <li>- No driving off designated access routes (into the bush) or any off-road driving; and</li> </ul>	Weekly	



ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> <li>- No animals or birds may be collected, caught, consumed or removed from the site.</li> </ul>		
	<ul style="list-style-type: none"> <li>- Residing and nesting organisms can be disturbed as a result of ambient noise from operations and movements of vehicles and equipment; and</li> <li>- Conflict with farmers and neighbours about rising of ambient noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>- Restrict excessive noise to areas of activities only;</li> <li>- Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturdays);</li> <li>- No activities are allowed between dusk and dawn;</li> <li>- Drill equipment shall be suitably positioned to ensure that noisy equipment is away from receptors;</li> <li>- Residents shall be provided at least two weeks' notice of drilling operations within 1 km of their property;</li> <li>- All equipment to be shut down or throttled back between periods of use; and</li> <li>- Comply with national civil aviation regulations about the use of a drone, if necessary.</li> </ul>	Daily	Site manager (or nominated site supervisor)
	<ul style="list-style-type: none"> <li>- Visual disturbances.</li> </ul>	<ul style="list-style-type: none"> <li>- Position drill equipment and other heavy equipment in such a way that it is out of sight from human receptors;</li> <li>- Barriers or fences shall be used if drilling occurs in locations that may affect residents or livestock;</li> <li>- Maintain good housekeeping standards on site; and</li> <li>- Maintain continuous communication with I&amp;APs to identify concerns and mitigation measures.</li> </ul>	Daily, weekly	
	<ul style="list-style-type: none"> <li>- Dust and emissions.</li> </ul>	<ul style="list-style-type: none"> <li>- All vehicles and machinery or equipment to be shut down or throttled back between periods of use;</li> <li>- Use existing access roads and tracks where possible;</li> <li>- Apply dust suppression where possible;</li> <li>- Restrict the speed of vehicles (<math>\leq 30\text{km/h}</math>); and</li> </ul>	Daily	

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> <li>- Specific activities that may generate dust and impact on residents shall be avoided during high wind events.</li> <li>- Residents need to be informed at least two weeks in advance that drilling operations are within 1km of their property;</li> <li>- Vehicles and machinery are to be regularly serviced according to the manufacturers' specifications and kept in good working order so as to minimise exhaust emissions.</li> </ul>		
	<ul style="list-style-type: none"> <li>- Loss of soil quality due to mixing of earth matter, trampling, compaction and pollution, and</li> <li>- Enhanced soil erosion.</li> </ul>	<ul style="list-style-type: none"> <li>- Where possible, plan access routes, drill pads and camps outside of existing drainage lines;</li> <li>- Where necessary, install diversions to curb possible erosion;</li> <li>- Restore drainage lines when disturbed;</li> <li>- Topsoil should be stockpiled separately, and re-spread during rehabilitation;</li> <li>- Limit the possibility of compaction and creation of a hard subsurface,</li> <li>- Limit the possibility of trampling;</li> <li>- During drilling, oil absorbent matting should be placed under and around the drill rig;</li> <li>- Equipment must be in a good condition to ensure that accidental oil spills do not occur and contaminate soil;</li> <li>- In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site; and</li> <li>- Limit the possibility of mixing mineral waste with topsoil.</li> </ul>	Weekly	
	Groundwater contamination	<ul style="list-style-type: none"> <li>- Ensure drill pads and spill kits are in place on site;</li> <li>- Consider alternative sites when the water table is too high;</li> <li>- Wastewater shall be contained; and</li> <li>- Where possible, water from existing water sources shall be used.</li> </ul>	Weekly	
<b>Airborne EM survey (AEM) over the EPL, possible low</b>	<ul style="list-style-type: none"> <li>- Perceived impact from low-flying EM survey activities on livestock and humans.</li> </ul>	Prior to conducting aerial surveys, both directly and indirectly affected parties should be informed in writing at least 2 weeks prior.	Once-off	-

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
flying, indication of line spacing		<p>The following information is to be included in the written communication sent to the interested and affected parties. This can be in the form of a Press Notice.</p> <ul style="list-style-type: none"> <li>- Company name;</li> <li>- Survey dates, time and duration;</li> <li>- Purpose of the survey;</li> <li>- Flight altitude;</li> <li>- Survey location, map of survey area and flight lines, and</li> <li>- Contact details for enquiries.</li> </ul>		
Vegetation clearance for access routes, drill sites and temporary contractor camps	<ul style="list-style-type: none"> <li>- Loss of plant species;</li> <li>- Loss of habitat;</li> <li>- Create landscape scars; and</li> <li>- Loss of Sense of Place.</li> </ul>	<ul style="list-style-type: none"> <li>- Use existing roads for access to avoid new tracks and cut lines;</li> <li>- Minimise clearance areas through proper planning of the exploration activities;</li> <li>- Route new tracks around established and protected trees, and clumps of vegetation;</li> <li>- Identify rare, endangered, threatened and protected species;</li> <li>- During toolbox talks and induction sessions, highlight to workers that the removal of significant plants should be avoided;</li> <li>- Where possible rescue and relocate plants of significance; and</li> <li>- Promote revegetation of cleared areas upon completion of exploration activities.</li> </ul>	Daily	<ul style="list-style-type: none"> <li>- Exploration Manager</li> </ul>
	<ul style="list-style-type: none"> <li>- Alien plants and weeds can accidentally be introduced.</li> </ul>	<ul style="list-style-type: none"> <li>- All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (not present on the project site) should have an internal weed and seed inspection completed prior to such equipment being used;</li> <li>- Ensure contractors receive induction on preventing the spread of alien weed;</li> <li>- Ensure the potential introduction and spread of alien plants is prevented;</li> </ul>	Monthly	<ul style="list-style-type: none"> <li>- Employees, contractors</li> <li>- Site manager (or nominated site supervisor)</li> </ul>

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> <li>- Ensure the correct removal of alien invasive vegetation and prevent the establishment and spread of alien invasive plants;</li> <li>- Eradicate weeds and alien species as soon as they appear; and</li> <li>- Make workers aware about alien species and weeds.</li> </ul>		
<p><b>Fuel handling and storage, maintenance on equipment, machinery and vehicles</b></p> <p><b>Inadequate control or accidental release of hazardous substances on site</b></p>	<ul style="list-style-type: none"> <li>- Soil contamination;</li> <li>- Water contamination; and</li> <li>- Enhanced accidental veld fires during high wind periods.</li> </ul>	<p><b>Storage</b></p> <ul style="list-style-type: none"> <li>- Label chemicals appropriately.</li> <li>- Chemicals with different hazard symbols should not be stored together - clear guidance on the compatibility of different chemicals can be obtained from the Materials Safety Data Sheets (MSDS) which should be readily available;</li> <li>- Store chemicals in a dedicated, enclosed and secure facility with a roof and a concrete floor. Chemical tanks should be completely contained within secondary containment such as bunding;</li> <li>- Consider the feasibility of substituting hazardous chemicals with less hazardous alternatives;</li> <li>- Storage and handling of fuels and chemicals shall be in compliance with relevant legislation and regulations; and</li> <li>- Fuels, lubricants, and chemicals are to be stored within appropriately sized, impermeable bunds or trays with a capacity not less than 110% of the total volume of products stored.</li> </ul> <p><b>Fire risk</b></p> <ul style="list-style-type: none"> <li>- No open fires are allowed to be lit by personnel, associated with the proponent anywhere on the EPL outside of dedicated campsites;</li> <li>- The proponent to ensure that exploration campsites have proper cooking facilities available to use. Gas stoves are the preferred option;</li> </ul>	<ul style="list-style-type: none"> <li>- Daily observations</li> <li>- Weekly inspections</li> </ul>	<p>Site manager (or nominated site supervisor)</p>

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> <li>- 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;</li> <li>- No unauthorised movement beyond the exploration areas and campsites is allowed;</li> <li>- Proper fire hazard identification signage to be placed in areas that store flammable material (e.g., hydrocarbons and gas bottles);</li> <li>- Control and reduce the potential risk of fire by segregating and safe storage of materials;</li> <li>- Avoid potential sources of ignition by prohibiting smoking in and around facilities; and</li> <li>- Fire extinguishers should always be at designated areas and should be inspected regularly.</li> </ul> <p><b>Spills</b></p> <p>Spill kits with the following items as a minimum should be made available on site:</p> <ul style="list-style-type: none"> <li>- Absorbent materials;</li> <li>- Shovels;</li> <li>- Heavy-duty plastic bags;</li> <li>- Protective clothing (e.g., gloves and overalls);</li> <li>- Major servicing of equipment shall be undertaken offsite or in appropriately equipped workshops;</li> <li>- For small repairs and unavoidable and necessary maintenance activities all reasonable precautions to avoid oil and fuel spills must be taken (e.g., spill trays, impervious sheets);</li> <li>- Provision of adequate and frequent training on spill management, spill response and refueling must be provided to all onsite personnel;</li> </ul>		

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> <li>- No refueling is to take place within 50 meters of groundwater boreholes, surface water or streams;</li> <li>- Vehicles and machinery are to be regularly serviced to minimise oil and fuel leaks; and</li> <li>- All major petroleum product spills (spill of more than 200 liters per spill) should be reported to the Ministry of Mines and Energy (MME) on Form PP/11 titled "Reporting of major petroleum product spill", attached as Appendix B.</li> </ul> <p><b>The following points therefore apply to all areas on the site:</b></p> <ul style="list-style-type: none"> <li>- Assess the situation for potential hazards;</li> <li>- Do not come into contact with the spilled substance until it has been characterised and the necessary Personal Protective Equipment (PPE) is provided; and</li> <li>- Isolate the area as required.</li> </ul> <p><b>The following measures are to be implemented in response to a spill:</b></p> <ul style="list-style-type: none"> <li>- Spills are to be stopped at the source as soon as possible (e.g., close valve or upright drum);</li> <li>- Spilt material is to be contained to the smallest area possible using a combination of absorbent material, earthen bunds or other containment methods;</li> <li>- Spilt material is to be recovered as soon as possible using appropriate equipment. In most cases, it will be necessary to excavate the underlying soils until clean soils are encountered;</li> <li>- All contaminated materials recovered subsequent to a spill, including soils, absorbent pads and sawdust, are to be disposed of at appropriately licensed facilities; and</li> <li>- A written incident report must be submitted to the general manager.</li> </ul>		



ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
<b>Generation of waste</b>	<ul style="list-style-type: none"> <li>- Soil contamination;</li> <li>- Water contamination;</li> <li>- Nuisance (visual impacts and litter); and</li> <li>- Ecological risks.</li> </ul>	<ul style="list-style-type: none"> <li>- Good housekeeping standards applied on site;</li> <li>- Training and raise awareness through toolbox talks and induction;</li> <li>- Implement a Standard Operational Procedure (SOP) on waste management, for all kinds of waste possible on-site (e.g., hydrocarbons, domestic, waste water);</li> <li>- Implement a culture of correct waste collection, waste segregation and waste disposal, complementary to the waste hierarchy – avoid, re-use, recycle; and</li> <li>- Wastewater discharges will be contained – no disposal of wastewater directly into the environment is allowed.</li> </ul>	<ul style="list-style-type: none"> <li>- Daily and weekly</li> </ul>	<ul style="list-style-type: none"> <li>- Employees, contractors</li> <li>- Site manager (or nominated site supervisor)</li> </ul>
<b>Water use</b>	<ul style="list-style-type: none"> <li>- Soil contamination;</li> <li>- Ground and surface water contamination; and</li> <li>Nuisance (visual and odour).</li> </ul>	<ul style="list-style-type: none"> <li>- Minimise the operational consumption of water throughout the lifespan of the project;</li> <li>- Visual monitoring and a photographic record should be kept of any surface and or groundwater intersected;</li> <li>- Recycle wastewater, where possible.</li> <li>- Install devices to prevent spills and overfills, e.g., shutoff devices for large volume tanks (e.g., &gt; than 2000lts).</li> <li>- Install an impermeable hardstand in areas of high-risk contamination to prevent ground infiltration by pollutants;</li> <li>- Segregation of wastewater (domestic and industrial effluent); and</li> <li>- During operation, monitoring of wastewater discharges (specific to a wastewater discharge permit conditions) should be conducted on a regular basis (quarterly).</li> </ul>	<ul style="list-style-type: none"> <li>- Daily inspection of operations</li> </ul>	<ul style="list-style-type: none"> <li>- Exploration Manager</li> <li>- Employees, contractors</li> <li>- Site manager (or nominated site supervisor)</li> </ul>

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
<b>Heritage</b>	<ul style="list-style-type: none"> <li>- Disruption of heritage sites.</li> </ul>	<p>In case of discovering or unearthing heritage sites, the following measures (chance-find procedure) shall be applied:</p> <ul style="list-style-type: none"> <li>- Works to cease and the area to be demarcated with appropriate tape by the site supervisor, and the site manager to be informed;</li> <li>- The site manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and inform the environment and social manager with the GPS position if possible</li> <li>- If works cannot proceed without damage to findings, the site manager to inform the environmental manager who will get in touch with an archaeologist who will provide advice.</li> <li>- Exploration manager or an archaeological specialist to evaluate the significance of the remains and identify appropriate action, for example, record and remove; relocate or leave in situ (depending on the nature and value of the remains);</li> <li>- Inform the police if the remains are human, and</li> <li>- Obtain appropriate clearance or approval from the competent authority. if required, recover and remove the remains to the national museum or national forensic laboratory as directed.</li> </ul>	<ul style="list-style-type: none"> <li>- Daily inspection</li> </ul>	<ul style="list-style-type: none"> <li>- General Manager, and</li> <li>- Deputy Manager (or nominated supervisor)</li> </ul>
<b>Job creation, skills development and business opportunities</b>	<ul style="list-style-type: none"> <li>- Beneficial socio-economic impacts on a local and regional scale.</li> </ul>	<ul style="list-style-type: none"> <li>- Maximise local employment and local business opportunities;</li> <li>- Enhance the use of local labour and local skills as far as reasonably possible; and</li> <li>- Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.</li> </ul>	<ul style="list-style-type: none"> <li>- Monthly</li> </ul>	<ul style="list-style-type: none"> <li>- Exploration Manager</li> </ul>

## 6 IMPLEMENTATION OF THE EMP

Exploration work will be carried out in compliance with the relevant requirements of the Minerals (Prospecting and Mining) Act, 1992. No significant impacts are anticipated for the activities that have been identified. Management and mitigation measures are in place for potential risks.

This EMP:

- A. Has been prepared pursuant to a contract with the proponent;
- B. Has been prepared on the basis of information provided to ECC up to November 2020;
- C. Is for the sole use of the proponent, for the sole purpose of an EMP;
- D. Must not be used (1) by any person other than the proponent or (2) for a purpose other than an EMP; and
- E. Must not be copied without the prior written permission of ECC.

ECC has prepared the EMP on the basis of information provided by the proponent, specialist reports and the environmental scoping report.

## 7 APPENDIX A: APPLICATION FOR A WASTEWATER DISCHARGE LICENCE



### DEPARTMENT OF WATER AFFAIRS & FORESTRY

FAX: (061) 208 7160 PRIVATE BAG 13184  
 TEL: (061) 208 7111 WINDHOEK  
 REFERENCE NO: ..... NAMIBIA

### **APPLICATION FOR A WASTEWATER DISCHARGE LICENCE, IN TERMS OF PART XIV OF THE WATER RESOURCES MANAGEMENT ACT, 2004**

(Act No. 24 of 2004 - as published in the Government Gazette of the Republic of Namibia, No. 3357, of 23 December 2004, Government Notice No. 284)

#### **A. GENERAL INSTRUCTIONS**

1. Applications must be submitted in duplicate to:  
 The Permanent Secretary  
 Attn.: Law Administration  
 Ministry of Agriculture, Water and Forestry  
 Private Bag 13184  
 WINDHOEK
2. Application Fee (to accompany this document): N\$ \_\_\_\_\_
3. The various sections have to be completed as follows:  
**Section B & C** - All applicants  
**Section D** - Complete only the part relevant to technology employed in your works.  
**Section E** - All applicants (compulsory!)
4. Only the relevant Sections that have been filled in need to be submitted with this application.
5. A separate application needs to be filled in for each different plant/works.

**NAME OF TREATMENT PLANT/WORKS:** \_\_\_\_\_

**PLACE:** \_\_\_\_\_ **GPS Coordinates:** \_\_\_\_\_  
 (e.g. town, settlement)

## B. GENERAL INFORMATION

1. Name of applicant: \_\_\_\_\_

2. Address - Contact Person: \_\_\_\_\_

- Postal: \_\_\_\_\_

- Physical: \_\_\_\_\_

- Tel No.: \_\_\_\_\_

- Fax No.: \_\_\_\_\_

- E-mail: \_\_\_\_\_

3. Region in which plant is situated: \_\_\_\_\_

4. Constituency in which plant falls: \_\_\_\_\_

5. Type of establishment:  
(e.g. school, town, industry) \_\_\_\_\_

6. Source of water supply:  
(e.g. borehole, river, sea) \_\_\_\_\_

7. Total water consumption: m<sup>3</sup>/day ADWF\*

(\*ADWF = Average Dry Weather Flow) m<sup>3</sup>/day ADWF\*

- Consumption based on the average usage over a 12-month period. m<sup>3</sup>/day ADWF\*
- List different sources separately m<sup>3</sup>/day ADWF\*

8. Application:

- Prepared by: Name : \_\_\_\_\_ Position: \_\_\_\_\_  
(e.g. Consultant) Signature: \_\_\_\_\_ Date: \_\_\_\_\_
- Responsible Executive: Name : \_\_\_\_\_ Position: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## C. TECHNICAL DETAILS - GENERAL

Answers to the following information must be contained in this application either from the questionnaire or as an attachment thereto (see also details in Appendix A):

NAME OF TREATMENT PLANT/WORKS: \_\_\_\_\_

1. Type of effluent (please also refer to Section D for classifications): \_\_\_\_\_

2. Site of works:

2.1 Submit a site plan indicating the exact location (or intended location) of the works. This plan should indicate (as a minimum):

- 2.1.1 General location of the works with regards to settlements, main roads, boreholes, rivers etc.
- 2.1.2 Layout plan of property showing all existing and proposed water pipes and effluent and drainage lines in distinctive colours.
- 2.1.3 Topographical plan/area photograph/contour plans showing the property and effluent treatment plant in relation to residential areas, rivers, pans, dams, lakes and boreholes.
- 2.1.4 Contour plans indicating the exact location of the effluent treatment works and point of discharge of final effluent in relation to watercourses that drain the area.
- 2.1.5 Give the following information:
  - 2.1.5.1 Distance to nearest inhabitants: \_\_\_\_\_m
  - 2.1.5.2 Distance to nearest water abstraction point (e.g. river, borehole): \_\_\_\_\_m
  - 2.1.5.3 Distance to nearest watercourse (e.g. dry river) and specify: \_\_\_\_\_m
  - 2.1.5.4 Wind direction (main/normal) \_\_\_\_\_

2.2 Submit overall details of works:

- 2.2.1 Type of effluent treatment system and a brief description of its method of operation. (If domestic effluents are dealt with by the local authority please enclose a letter from the authority confirming this agreement).
- 2.2.2 Flow diagram/mass balances to show the present average quantities of incoming water, recycled water, final outflow, seepage and evaporation losses (all in m<sup>3</sup>/day).
- 2.2.3 Layout orientation drawing indicating all major treatment units and fence around works.
- 2.2.4 Complete flow diagram and key design parameters to include:
  - 2.2.4.1 Dimensions and design capacities of each unit process;
  - 2.2.4.2 Process Flow Diagram(s) and major instrumentation employed, e.g. water meters;
  - 2.2.4.3 Loadings on the system (e.g. hydraulic, COD, BOD, nitrogen, phosphate);
- 2.2.5 Indicate allowances that have been made for future expansion and increased loads (if any).
- 2.2.6 Methods of sludge disposal or recirculation.
- 2.2.7 Disinfection of the final effluent (indicate dosing type, method, retention period and optimum disinfectant level in final effluent).

3. Monitoring boreholes for monitoring groundwater pollution over time must be available within 500 m of the point of final effluent discharge.

4. Please note: Additional information is required for new treatment plants (e.g. an environmental impact assessment) - details can be obtained from the Department of Water Affairs and Forestry.

5. All relevant information must be included with this application. **It is a criminal offence to deliberately withhold vital information relevant to this application.** Where applicants are found to be in contravention with this requirement, they may/will be prosecuted.



## D. TECHNICAL DETAILS - SPECIFIC

Applicants should only complete sections relevant to their specific effluent (please tick relevant box):

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | D-1: Domestic Effluent - Includes wastewater collected in towns (excluding industrial effluent!), villages, schools, lodges, administration buildings. |
| <input type="checkbox"/> | D-2: Industrial Effluent - Includes wastewater generated by any industry, factory, etc.  |
| <input type="checkbox"/> | D-3: Mining Effluent - Includes wastewater accumulated or collected due to mining operations (e.g. Acid mine wastewater)                               |
| <input type="checkbox"/> | D-4: Combination/mix of various effluents (list major effluent streams on page 11)   |

### Final Effluent Reuse

The pressure on Namibia's existing fresh-water supplies can, to a great extent, be eased by the sensible reuse of effluents for a variety of purposes including dust control, agriculture and industrial processes. Therefore, reuse of effluent after suitable treatment is encouraged.

The allowable reuse of an effluent is dependent upon its quality as well as many local circumstances and hence each application in this category needs careful and individual scrutiny, which should be undertaken by a specialist in this field and must be supported by an environmental impact assessment study.

A separate licence for effluent reuse is required and more details in this regards can be obtained from the Department of Water Affairs and Forestry.

**D-2. INDUSTRIAL EFFLUENTS**

Plant Name: .....

2.1	Describe industry and major activities resulting in effluent generation	
2.2	Capacity / Flowrates :	
	Design - Average daily flow	m <sup>3</sup> /d
	- Peak hourly flow	m <sup>3</sup> /h
	Actual (if in operation) - Average daily flow	m <sup>3</sup> /d
	- Peak hourly flow	m <sup>3</sup> /h
	If ponds are employed, state total surface area	m <sup>2</sup>
2.3	List only major contaminants (also attach full analysis of typical effluent sample)	
2.4	Type of treatment employed (give short overview of process):	
2.5	List major treatment chemicals* employed in the unit process(es):	
2.6	Final effluent quality after treatment (put envisaged final quality for a new plant):	
2.7	Sludge generation:	
	- Volume generated	m <sup>3</sup> /d
	- Mass	kg/d (dry solid)
	- Method of disposal	
	- Place of disposal	
	- Major constituents	
	- If sludge ponds, state frequency of cleaning	
2.8	Do you employ cleaner production principles (CPP)? Yes/No	
	If "yes", elaborate:	
	_____	
	_____	
2.9	Is the following documentation included (give reason if not)?	
	▪ Water (and waste) management plan:	Yes/No
	▪ Decommissioning plan:	Yes/No

\* For the chemicals employed, proper mass balances should be included that show chemical usage, movement and discharge within the factory/process(es). All safety aspects related to handling, storage and disposal of chemicals on site must be followed at all times.

**D-4. COMBINATION OF VARIOUS EFFLUENTS**

Plant Name: .....

4.1	Describe major activities resulting in effluent generation (e.g. type of industry):				
4.2	Capacity / Flowrates of different streams (major only)	1	2	3	
	Type (e.g. domestic, industrial, mining, others)				
	Design - Average daily flow				m <sup>3</sup> /d
	- Peak hourly flow				m <sup>3</sup> /h
	Actual (if in operation) - Average daily flow				m <sup>3</sup> /d
	- Peak hourly flow				m <sup>3</sup> /h
4.3	List only major contaminants (also attach full analysis of typical effluent sample)				
4.4	Type of treatment employed (give short overview of process)				
4.5	List major treatment chemicals employed in the unit process(es):				
4.6	Final effluent quality after treatment (put envisaged final quality for a new plant)				
4.7	Sludge generation:				
	- Volume generated				m <sup>3</sup> /d
	- Mass				kg/d (dry solid)
	- Method of disposal				
	- Place of disposal				
	- Major constituents				
	- If sludge ponds, state frequency of cleaning				

**E. FINAL EFFLUENT DISPOSAL**

1.4.1	Where is the final effluent discharged to? (E.g. French drain, pumped out by Local Authority, dry river course, perennial river, etc.)	
1.4.2	IF soakaway, state: - Type of soil - Suitability/porosity of soil - Size of soakaway area - Include topography and plan of soakaway area	
1.4.3	Is there any post-treatment applied? (e.g. disinfection, filtration)	
1.4.4	Is the final effluent re-used? (Yes/No)	
	If "Yes", complete:	
	- Do you have a reuse licence?	
	- Amount of water that will be re-used:	m <sup>3</sup> /d
	- For what application:	
	- Type of irrigation used (if applicable):	
	- What crops are grown:	
1.4.5	- Area of land that will be irrigated:	ha
	Name (if any) downstream users (downstream of discharge point).	
1.4.6	Past records of complaints or objections by people living close to works:	

**Reuse:**

A reuse licence is required – details can be obtained from the Department of Water Affairs and Forestry.

**Irrigation:**

The crops allowed to be irrigated are dependent upon effluent quality (details will be supplied on request by the Department of Water Affairs and Forestry).





**10. Type of petroleum product involved in petroleum product spill .....**

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.....  
.....

**11. Quantity of the petroleum product spill .....**

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.....  
.....

**12. Indicate whether the petroleum product has or will have any negative effect on the environment and the safety and health of person or the property of persons .....**

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**13. Provide full details of all remedial actions taken to minimise risks associated with petroleum product spills and all cleaning-up operations taken in connection therewith .....**

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**DECLARATION**

I, .....,  
hereby declare that the information submitted by me in this application is true and correct.

.....  
*Signature*

.....  
*Place*

.....  
*Date*



## 9 APPENDIX C - COMPLAINTS REGISTER TEMPLATE

NAME	CONTACT DETAILS	DATE AND LOCATION OF COMPLIANT	NATURE OF COMPLIANT	ACTION TAKEN TO RESOLVE	NOMINATED PERSON TO RESOLVE ISSUE <i>(Signature)</i>	DATE OF RESOLUTION/ CLOSED OUT COMPLAINT

## 10 APPENDIX D - MONTHLY INTERNAL COMPLIANCE CERTIFICATE

FOR THE PERIOD ..... TO .....

MANAGEMENT REPRESENTATIVE:	SIGN:
SHE COORDINATOR:	SIGN:

Date of Submission: \_\_\_\_\_

Key activities on site during the month: \_\_\_\_\_

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**NON-CONFORMANCE:**

Area of activity: \_\_\_\_\_

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Reason: \_\_\_\_\_

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Responsible party: \_\_\_\_\_

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Results: \_\_\_\_\_

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Correction action taken:

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Intended follow-up:

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**GOOD PERFORMANCE:**

Description of activity or action in which the area/person went beyond compliance towards responsible care for the environment:

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**ADDITIONAL COMMENTS:**

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