REPORT:

EPL 8127 ENVIRONMENTAL SCOPING REPORT
PLUS IMPACT ASSESSMENT

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EXECUTIVE SUMMARY

Votorantim Metals Namibia (Pty) Ltd (herein referred to as Votorantim or the Proponent) intends to undertake exploration activities on Exclusive Prospecting Licence (EPL) 8127 for base and rare metals, industrial minerals, and precious metals in the Otjozondjupa Region. The EPL lies in an area south-east of Otavi.

The proposed Project triggers listed activities in terms of the Environmental Management Act, No. 7 of 2007 and its regulations, No. 30 of 2012. Therefore, an environmental clearance certificate is required. As part of the environmental clearance certificate application, an Environmental Impact Assessment (EIA) has been undertaken to satisfy the requirements of the Environmental Management Act, No. 7 of 2007. This environmental report and environmental management plan (EMP) shall be submitted to the competent authority as part of the application for the environmental clearance certificate.

The proposed exploration activities on EPL 8127 include soil sampling, ground, and airborne geophysical surveys (audio-magnetotelluric, induced polarization and magnetic ground surveys), geological mapping, and exploration drilling on selected target areas. Some limited bush-clearing in bush encroached areas will be carried out, for the creation of working areas and access tracks where necessary. All site activities will be managed according to stringent environmental requirements that Votorantim upholds in its exploration Projects, as per its own corporate policies. Access agreements will be entered into with all farmers or holders of private ground which may be accessed.

The exploration activities will commence as soon as an environmental clearance certificate has been granted and activities are expected to be conducted over a 3-year period, or the duration of the exploration licence.

The vegetation type covered by this EPL area is thornbush shrubland. It is broadly classified as a dense shrubland vegetation structure, with vegetation dominated by relatively dense stands of woody shrubs and trees. The area supports a high terrestrial diversity of animal and plant life, with the plant diversity in the area supporting more than 500 species.

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

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

EPL 8127 is located mainly in the Kunene South Groundwater Basin. The area is underlain by dolomites, which show a high potential of groundwater with an increased potential where fractures and faults occur on a local scale. The aquifer is reliable, as it is frequently recharged and water quality is generally of a high standard (Mendelsohn et al., 2002). The potential for contamination from the proposed activities is regarded as minimal. Protection of water quantity and quality is addressed in the EMP.

This study concluded that a potential environmental risks, which may require further investigation, is related to the cumulative impacts as a result of visual disturbance, nuisance of noise, the loss of sense of place and potential conflict with farm or landowners due to ongoing exploration activities and increased movement onsite. Receptors are farm owners, neighbours, tourists, and visitors. The identified risks potentially requiring further investigation are considered to be of moderate significance, however with additional mitigation, the significance can be reduced to minor. These additional mitigation measures include:

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

The overall potential impact of this proposed Project is not considered significant as it does not widely exceed recognised levels of acceptable change, does not threaten the integrity of the receptors, and it is not material to the decision-making process. The assessment is considered to be comprehensive and sufficient to identify impacts, and it is concluded that no further assessment is required.
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<tr>
<th>ABBREVIATIONS</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>AEM</td>
<td>Airborne Electromagnetic</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>AMT</td>
<td>Audio Magneto Telluric</td>
</tr>
<tr>
<td>COVID19</td>
<td>Corona Virus Disease 2019</td>
</tr>
<tr>
<td>DEA</td>
<td>Directorate of Environmental Affairs</td>
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<tr>
<td>ECC</td>
<td>Environmental Compliance Consultancy</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EISA</td>
<td>Environmental and Social Impact Assessment</td>
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<td>EMA</td>
<td>Environmental Management Act</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>EPL</td>
<td>Exclusive Prospecting Licence</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental and Social Impact Assessment</td>
</tr>
<tr>
<td>GSN</td>
<td>Geological Survey of Namibia</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>I&amp;AP</td>
<td>Interested and Affected Parties</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>IHME</td>
<td>Institute for Health Metrics and Evaluation</td>
</tr>
<tr>
<td>MAWLR</td>
<td>Ministry of Agriculture and Land Reform</td>
</tr>
<tr>
<td>MEFT</td>
<td>Ministry of Environment, Forestry and Tourism</td>
</tr>
<tr>
<td>MME</td>
<td>Ministry of Mines and Energy</td>
</tr>
<tr>
<td>MPMRC</td>
<td>Minerals (Prospecting and Mining Rights) Committee</td>
</tr>
<tr>
<td>NDP5</td>
<td>National Development Plan Five</td>
</tr>
<tr>
<td>NSA</td>
<td>National Statistics Agency</td>
</tr>
<tr>
<td>RAB</td>
<td>Rotary Air Blast</td>
</tr>
<tr>
<td>RC</td>
<td>Reverse Circulation</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
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## TERMINOLOGIES ASSOCIATED WITH EXPLORATION

<table>
<thead>
<tr>
<th>TERM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td><strong>REMOTE SENSING</strong></td>
<td>Techniques in mineral exploration enable explorers to evaluate large areas of the earth remotely without having to undertake ground-based exploration operations. Remote sensing may be used to map the geology and structure that potentially localise the ore deposits, or may be used to identify rocks, which have been hydrothermally altered. Remote sensing involves the use of aircraft and satellite-based equipment to obtain data to record spectral data from the surface of the earth. Remote sensing includes several tools and techniques including geographical information systems, radar, and sonar. Typically, satellites or high-flying aircraft are used in the data collection process. It is a useful tool when searching for minerals and can indicate where deposits could be located. Remote sensing aids in narrowing down the field survey area and helps to identify target areas that may be considered for more.</td>
</tr>
<tr>
<td><strong>AIRBORNE GEOPHYSICAL SURVEYS</strong></td>
<td>Using radiometric techniques, are a key aspect in mineral exploration, enabling explorers to probe underground, mapping geology and structure, including potentially direct identification of mineral deposits. Modern surveys are flown at a low level in a grid pattern, adhering fully to the safety margins prescribed by the Civil Aviation Authority (CAA) of Namibia.</td>
</tr>
<tr>
<td><strong>GEOLOGICAL MAPPING</strong></td>
<td>Of outcrops is used to describe the primary lithology and morphology of rock bodies as well as age relationships between rock units. Mapping is a crucial part of refining subsurface targets, as it provides structural information and can be used to predict subsurface geology. This will be conducted concurrently with the geochemical sampling process.</td>
</tr>
</tbody>
</table>
| **GEOCHEMICAL SAMPLING**      | Soil and rock sampling is a non-invasive technique to determine the existence and extent of mineralization and a potential resource. Geochemical data are used to focus on areas of higher mineral potential as the Project advances and help to define drill targets. They assist the company to drill more selectively and thereby increase the chances of intersecting mineralised zones during exploration and reduce the overall footprint of exploration and environmental impact in the area. Geochemical surveys will be the first ground exploration method to be undertaken by the Proponent in the licence area.  
  - **SAMPLING** - Selecting a fractional but representative part of the soil or rock for analysis. |
<p>| <strong>GROUND GEOPHYSICAL SURVEYS</strong> | Magnetic or Induced Polarization (IP) techniques may be undertaken, as appropriate, to collect data that indicate essential rock properties, particularly at depth. They are also used to map geological structures. IP surveys involve sending electrical currents into the ground, measured via electrodes along linear cut-lines up to 3 km long to provide access to electrical cables. Small holes in the ground (0.2m x 0.2m x 0.3m) will be required for IP electrodes every 25 or 50m along a survey line. The majority of EM techniques are completely non-invasive and operate by sending electromagnetically induced currents into the ground. EM surveys are conducted along the same linear traverse lines. A variation is the Audio-Magneto Telluric (AMT) technique, in which surveys utilize... |</p>
<table>
<thead>
<tr>
<th>TERM</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>the same lines and small holes in the ground, but without the application of high voltage electrical currents.</td>
<td></td>
</tr>
<tr>
<td>RAB DRILLING</td>
<td>(Rotary Air Blast drilling) is an open-hole technique that injects compressed air down the drill pipe and recovers the drill chip fragments, on the outside of the drill stem.</td>
</tr>
<tr>
<td>DIAMOND DRILLING</td>
<td>Entails the use of a diamond-studded drill bit to obtain core samples of two cm or more in diameter. Bio-degradable drill additives will be used during diamond core drilling. Soil, rock, and drill core samples will be temporarily stored at the site office. Exploration activities are usually undertaken in phases, with periods of no field activity between them, whilst awaiting analytical results, and the integration and interpretation of data to decide on the next phase of exploration.</td>
</tr>
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</table>
1 INTRODUCTION

1.1 PROJECT OVERVIEW

Environmental Compliance Consultancy (ECC) has been engaged by the Proponent (Votorantim Metals Namibia (Pty) Ltd) to undertake an environmental scoping report plus impact assessment (ESIA) and an environmental management plan (EMP) in terms of the Environmental Management Act, 2007 and its regulations. An environmental clearance application will be submitted to the relevant competent authorities, the Ministry of Mines and Energy (MME) and the Ministry of Environment, Forestry and Tourism (MEFT).

The Proponent proposes to undertake mineral exploration activities on EPL 8127 for base and rare metals, industrial minerals, and precious metals in the Otjozondjupa Region. The proposed Project area lies mainly near the B8 road, which runs between Otavi and Grootfontein (Figure 1).
A network of farm roads and tracks provide access to the EPL (Figure 2). Otavi population is approximately 5200 inhabitants and it is located at the intersection of the B1, B8 and the C39 roads in the Otjozondjupa Region. The B1 connects Otavi with Otjiwarongo to the south and Oshivelo to the north.

Kombat is the closest town to the EPL, located along the B8 road (Figure 2). Kombat is a mining town, historically known for its rich copper deposits, however, the copper mining operations ceased in 2008 (Knowledge Kombat, 2016). Kombat has a population of approximately 3 000 permanent residents, with visits from neighbouring farms and settlements for school, medical treatment, and other basic necessities.

The proposed Project area can be accessed via the B8 road, east of Otavi and via the D2806 road southwest of Kombat (Figure 2). The following figure provides more detail about surrounding towns and access routes to EPL 8127.
Figure 2 - Accessibility map of EPL 8127
1.2 SCOPE OF WORK

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

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

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

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

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

The details of the Proponent are set out in Table 1.

<table>
<thead>
<tr>
<th>Contact</th>
<th>Postal address</th>
<th>Email address</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
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<td>P O Box 97957, Windhoek Namibia</td>
<td><a href="mailto:efreyer@iway.na">efreyer@iway.na</a></td>
<td>+264 81 124 7342</td>
</tr>
</tbody>
</table>

1.4 **ENVIRONMENTAL CONSULTANCY**

ECC, a Namibian consultancy (registration number Close Corporation 2013/11401), has prepared this scoping report and impact assessment on behalf of the Proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across southern Africa, in both the public and private sectors. ECC is independent of the Proponent and has no vested or financial interest in the proposed Project, except for fair remuneration for professional services rendered. All compliance and regulatory requirements regarding this ESIA report should be forwarded by email or posted to the following address:

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Tel: +264 81 669 7608
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1.5 **ENVIRONMENTAL LEGAL REQUIREMENTS**

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

<table>
<thead>
<tr>
<th>Listed activity</th>
<th>ESIA screening finding</th>
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<tbody>
<tr>
<td>FOREST ACTIVITIES 4. The clearance of forest areas, deforestation, timber harvesting or any other related activity that required authorisation in terms of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.</td>
<td>The proposed Project may require limited vegetation clearing in bush encroached areas for access tracks and site camps. Specially protected plant species will not be cleared without approval from the competent authority.</td>
</tr>
<tr>
<td>Listed activity</td>
<td>ESIA screening finding</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>WATER RESOURCE DEVELOPMENTS</strong> 8.1 The abstraction of groundwater or surface water for industrial or commercial purposes.</td>
<td>Due to the drilling of exploration boreholes, the abstraction of groundwater is possible, although it is intended that water will be obtained from existing boreholes in the proposed Project area.</td>
</tr>
<tr>
<td><strong>MINING AND QUARRYING ACTIVITIES</strong> 3.1 The construction of facilities for any process or activities which requires a licence, right or other forms of authorisation, and the renewal of a licence, right or other forms of authorisation, in terms of the Minerals (Prospecting and Mining Act), No. 33 of 1992.</td>
<td>The proposed Project has obtained an EPL from MME; the Proponent now requires an environmental clearance certificate from DEA/MEFT for the search of base and rare metals, industrial minerals, and precious metals. Soil and rocks will be sampled within selected target areas of the Project area.</td>
</tr>
<tr>
<td>3.2 Other forms of mining or extraction of any natural resources whether regulated by law or not.</td>
<td></td>
</tr>
<tr>
<td>3.3 Resource extraction, manipulation, conservation, and related activities</td>
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2 APPROACH TO THE IMPACT ASSESSMENT

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

The EIA process in Namibia is governed and controlled by the Environmental Management Act, No. 7 of 2007 and its regulations, No. 30 of 2012, which is administered by the Office of the Environmental Commissioner through the DEA of the MEFT.

The aim of this assessment is to identify, predict, evaluate, and mitigate the potential impacts of the proposed Project on the natural and human receiving environment, scope the available data and identify the gaps that need to be filled. The assessment process helps to determine the spatial and temporal scope and identify the assessment methodology which is most applicable for use. In addition, the assessment process and subsequent reports are to apply the principles of environmental management to the proposed activities; reduce the negative and increase the positive impacts arising from the Project; provide an opportunity for the public to consider the environmental impacts of the proposed Project through meaningful consultation, and to provide a channel to present the findings of the assessment process to competent authorities for decision making.

2.2 THE ASSESSMENT PROCESS

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

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

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

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

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

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

2.4 SCOPING OF THE ENVIRONMENTAL ASSESSMENT

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

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

Feedback from consultation with the client and stakeholders are also informed in this process.

The following environmental and social topics and subtopics were scoped into the assessment:

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

BIOPHYSICAL ENVIRONMENT
- Dust emissions
- Soil and geology
- Terrestrial ecology
- Terrestrial biodiversity (including fauna and flora)
- Groundwater (potential cumulative impact). Water management suggestions are contained in the EMP.

The following topic was scoped out of the ESIA, as no likely significant impacts are predicted as the proposed Project poses little to no change from the current baseline, therefore are not discussed further in this report.
Heritage: A desktop review of the general EPL 8127 area revealed no sites of heritage interest and no sites of heritage connotation. There are no known heritage sites of value near or around the proposed Project site either. Although, it is unlikely that the proposed exploration activities would potentially uncover and impact any sensitive and or high value heritage finds in the area, impacts were considered and assessed.

Mitigation measures have been included in the EMP which also contains a Standard Operating Procedure (SOP) called a “Chance-Find” procedure to be utilised in the unlikely event of a possible archaeological find during exploration.

2.5 Baseline Studies

Baseline studies are undertaken as part of the scoping stage, which involves collecting all pertinent information from the current status of the receiving environment. This provides a baseline against which changes that occur as a result of the proposed Project can be measured. For the proposed Project, baseline information was obtained through a desktop study, consultation, and engagement with stakeholders (Appendix C), focussing on environmental receptors that could be affected by the proposed Project, verified through site-specific information. The baseline information is covered in Section 5.

2.6 ESIA Consultation

Public participation and consultation are a requirement in terms of Section 21 of the Environmental Management Act, No. 7 of 2007 and its regulations for a Project that requires an environmental clearance certificate. Consultation is a compulsory and critical component in the ESIA process, aimed at achieving transparent decision-making, and can provide many benefits.

The objectives of the stakeholder engagement process are to:

- Provide information on the Project to I&APs: introduce the overall concept and plan;
- Clarify responsibility and regulating authorities;
- Listen to and understand community issues, concerns and questions;
- Explain the process of the ESIA and timeframes involved; and
- Establish a platform for ongoing consultation.

2.6.1 Interested and Affected Parties

The proposed Project (EPL 8127) overlaps with nine farms (Figure 4). All owners of the farms that overlap or border EPL 8127 were identified as I&APs, as well as the relevant authoritative bodies. Other I&APs will be identified through invitations such as the newspaper advertisements and site notices.
Figure 4 - Location of EPL 8127 relative to neighbouring farms
2.6.2 NON-TECHNICAL SUMMARY

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

2.6.3 NEWSPAPERS AND ADVERTISEMENTS

Notices regarding the proposed Project and associated activities were circulated in three newspapers namely the ‘Republikein, Sun, and Allgemeine Zeitung’ on the 21st and 28th July (see Appendix C). The purpose of this was to commence the consultation process by informing the public about the Project and enabling I&APs to register any comments and interest raised for the Project.

2.6.4 SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of the proposed Project. The notice was set up at the boundary of the EPL as illustrated in Appendix C.

2.6.5 PUBLIC MEETING

In terms of Section 22 of the Environmental Management Act, No. 7 of 2007 and its regulations, for the purpose of registering I&APs. A public meeting is not a requirement during the public consultation process for all proposed Projects. As a result, and based on the public consultation feedback and comments, a public meeting was not deemed necessary for this Project.
The I&APs were encouraged to provide constructive input during the consultation periods. Matters of concern raised during the initial round of consultation have been incorporated into the EMP. The Proponent met with a particularly concerned I&AP, Peter Zensi, personally whose concerns are captured below and have been incorporated in Table 9 - scoping assessment findings and proposed mitigation measures and Table 3 environmental risks and issues, and mitigation and monitoring measures section of the EMP.

### Table 3 - I&AP / stakeholder comments received

<table>
<thead>
<tr>
<th>No.</th>
<th>I&amp;AP / stakeholder comment received</th>
<th>Response / clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FEEDBACK RECEIVED FROM I&amp;APs FROM THE FIRST ROUND OF PUBLIC CONSULTATION (ADVERTS, SITE NOTICES AND THE Nts MADE AVAILABLE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mr. M Von Maltzahn via email 16 November 2021</td>
<td>Refer to section 2.7 describing the review periods as provided in the scoping assessment. Further to the response during the latter part of November 2021, Mr. Zensi indicated a face-to-face meeting was held with Mr. Zensi by the Proponent. Refer to Section 2.7 describing the review periods as provided in the EMP.</td>
</tr>
</tbody>
</table>
Mr. M. Von Maltzahn via email
16 November 2021
Farm Segen

Noted. Land access agreements will be entered into between the proponent and the applicable landowners before any exploration work can commence on private property. The land access agreements will contain all the terms and conditions agreed to by both parties before exploration can commence.

Mr. M. Von Maltzahn via email
16 November 2021
Farm Segen

The conditions associated with the use of access roads by the exploration team will be negotiated and agreed to between the proponent and the applicable landowners before any exploration work can commence on private property. The land access agreements will be entered into between the proponent and the applicable landowners before any exploration can commence on private property.

Mr. M. Von Maltzahn via email
16 November 2021
Farm Segen

According to the Environmental Scoping Report plus Impact Assessment there is mentioning of using mainly existing roads. This will need to be discussed and agreed on and specified in a contract. From previous experience, we know that there can be considerable costs and expenses related to the use of access roads. We rely on our farm roads for all our farming activities, and we depend on them to be always drivable. We cannot afford to risk that heavy use of access roads at the site will cause damage to our farms.

Mr. M. Von Maltzahn via email
16 November 2021
Farm Segen

In order to ensure that the site is safe for exploration activities, we demand written contracts before any exploration work can commence. A written contract clearly stipulating the responsibilities, actions, and environmental mitigation measures will be negotiated and agreed to between the proponent and the applicable landowners before exploration can commence. See Table 9 for further recommendations to maintain road surfaces.
EPL 8127 Environmental Scoping Report Plus Impact Assessment

Votorantim Metals (Pty) Ltd
MARCH 2022 REV 01 PAGE 26 OF 111

ECC Report N
o
 ECC-88-351-REP-06-D

No I&AP / stakeholder comment received

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Response / clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. M Von Maltzahn via email Farm Segen 16 November 2021</td>
<td>Noted. The Proponent of the proposed Project is required to apply for an abstraction permit should they intend to drill a borehole for water abstraction. Alternatively, the Proponent may have agreements with the farmers or landowner to abstract water from the existing boreholes. In this case, no permit applications are necessary. The Proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties. Should water not be sufficient the Proponent may buy and transport water to site.</td>
</tr>
<tr>
<td>Mr. M Von Maltzahn via email Farm Segen 16 November 2021</td>
<td>Noted. This aspect is recognized to be included in the land access agreement.</td>
</tr>
<tr>
<td>Mr. M Von Maltzahn via email Farm Segen 16 November 2021</td>
<td>Noted. The Proponent of the Proposed Project is required to apply for an abstraction permit should they intend to drill a borehole to site. The use of water from the boreholes on the farms will be discussed and agreed upon and specified in a contract.</td>
</tr>
<tr>
<td>Mr. M Von Maltzahn via email Farm Segen 16 November 2021</td>
<td>Noted. Land access agreements will be entered into between the parties. These fragile roads will negatively affect our ability to conduct our livelihoods. In the wet season we prohibit all exploration activities. Water The use of water from the boreholes on the farms will need to be discussed and agreed on and specified in a contract. Farm Segen does not have water available for the exploration activities and thus water must be supplied by the Proponent and bought to site if needed. This exploration company has a really bad track record. Peter Zensi and other farmers have already been subjected to their bad practices and although the Proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties. Noted. Land access agreements will be entered into between the parties.</td>
</tr>
</tbody>
</table>

We would like to stress the importance of a meaningful inclusion of all stakeholders in the development process.
<table>
<thead>
<tr>
<th>No</th>
<th>Stakeholder / Commentator</th>
<th>Details / Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Peter Zensi</td>
<td>Farm Hamburg #504</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21 Nov. 21</td>
</tr>
</tbody>
</table>

**Stakeholder details**

- **Response / clarification**
  - Mitigations to limit the negative effects of the exploration activities, we know that these measures have not been taken.
  - There is no access to our farms until we have signed written contracts.
  - Monitoring and audit procedures are done by the independent auditor as set up by the Proponent and when required.
  - There is no access to our farms until we have signed written contracts.

**Scoping Report Plus Impact Assessment**

- No I&AP / stakeholder comment received.
<table>
<thead>
<tr>
<th>Stakeholder Comment Received</th>
<th>Response / Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prospecting should take 2 – 6 months? Votorantim were busy from June 2019 and started drilling in June 2021 – 2 years.</td>
<td>Peter Zensi  Farm Hamburg #504  21 Nov. 21</td>
</tr>
<tr>
<td>Exploration activities are granted by the EPL licence for 3 years and by the environmental clearance certificate for 3 years and therefore should the Proponent obtain all necessary approvals; they can prospect on the specific EPL for the validity period. Exploration activities may be classified in different phases.</td>
<td></td>
</tr>
<tr>
<td>The noise is not the problem, it is the continual movement of vehicles and people on the farm: no stranger is allowed to move on the farms, as this is private property. Now suddenly every day strangers are allowed to move freely in vehicles and on foot around your private property. This causes a lot of stress to the owner/manager as any stranger is seen as a potential danger to the safety and property of the residents on the farm. Although you mention that theft may increase due to Votorantim’s activities I do not find any mitigation in your study.</td>
<td>Peter Zensi  Farm Hamburg #504  21 Nov. 21</td>
</tr>
<tr>
<td>For clarity in our study, it has been assessed that the exploration team may be blamed for stock theft due to their presence in the area. Please refer to the ESIA chapter 7, Table 9 page 69 of 95 and the EMP Table 3, pages 19 of 27 and 20 of 27.</td>
<td></td>
</tr>
<tr>
<td>Employment of people from Otavi: Votorantim and their contractors must make sure to employ trustworthy people with good references from previous employers. These employees are a potential threat to the safety of farmers and their property. Votorantim must provide the farmer with a list of names, as well as copies of documents and residential addresses. It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to negotiate access agreements between the Proponent of the proposed Project and the farm owner. Please be informed that access agreements are only negotiated between the Proponent of the proposed Project and the farm owner and not the environmental consultant.</td>
<td></td>
</tr>
<tr>
<td>Waste management: no mention of the danger of cattle and wildlife being infested with measles due to defecation into the wild. Long lasting Transmission of Measles: Measles is a highly contagious virus that lives in the nose and throat mucus of an infected person. It can spread to others through coughing and sneezing. Also, measles lives in the nose and throat mucus of an infected person. It can spread to others through coughing and sneezing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AP / Stakeholder Comment Received</td>
</tr>
<tr>
<td>----</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

- Personal vaccinations are recommended during operations. The EMP states where the vaccines are to be administered.
- The Proponent of the proposed Project ensures monitoring are conducted during operations. The EMP states who are the responsible personnel.

- Increased movement of people, machinery and vehicles leads to disturbance of wildlife which leaves the area. This is of major concern to farmers who rely on hunting and sale of venison for an income. Mitigation: please address movement as possible.
- Deterioration of roads: drive as little as possible. Not mentioned in EMP. Creation of access roads point noted and added.
- 1.4 Management of the EMP. The monitoring of compliance shall be undertaken... as well as monthly inspections. Who does these inspections? I have witnessed none of them. I have confidence that these inspections will be undertaken... as well as monthly inspections. Why don't these inspections take place? I have never witnessed any. They leave the problems to the farmers. High magnitude of change and high significance, not addressed.
- It is time to move on slowly. If low speeds, if wildlife is encountered, stop and give wildlife space. The impact assessment both in the ESIA chapter 7, Table 8 of the report and EMP Table 3, page 20 of 27, Table 3. Creation of access roads point noted and added.
- Functional toilets shall be ensured for the campsites. The EMP Table 3, page 24 of 27, states that this is a requirement.

- Peter Zensi
  Farm Hamburg #504
  21 Nov 21
<table>
<thead>
<tr>
<th>No</th>
<th>Respondent / Stakeholder Comment Received</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 Employment</td>
<td>Please add points mentioned above</td>
<td>Details</td>
</tr>
<tr>
<td>Peter Zensi</td>
<td>Farm Hamburg #504</td>
<td>21 Nov. 21</td>
</tr>
<tr>
<td></td>
<td>It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to employ local residents of the proposed Project.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The proposed Project has its own HR policies and selection procedures of employees.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please be informed that access agreements are only negoctated with the landowners of the proposed Project.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Groundwater: Where possible, water from existing boreholes will be used. - Please change to For drilling Voluntaryism shall make provision for their own water sources.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste management: please explicitly mention functional toilets and who must inspect at which intervals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Executive Summary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;All site activities...to Voluntaryism upheld?&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Proponent has to comply to the standards, laws, and policies enforced by the responsible personnel in the EMP. Table 3 page 24 of 27 states conducted during operations, the EMP states who are the responsible personnel.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is very vague. What standards do Voluntaryism uphold?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Proponent of the proposed Project ensures monitoring are conducted during operations, the EMP states who are the responsible personnel.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kindly refer to the EMP, Table 3 page 25 of 27.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;Where possible, water from existing water sources shall be used&quot; – please change to &quot;for drilling Voluntaryism shall make provision for their own water sources.&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Proponent may only use water resources such as existing boreholes subject to agreements with the landowner. In our studies water may be brought to site in a case where there is insufficient supply of water.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Proponent of the proposed Project ensures monitoring are conducted during operations, the EMP states who are the responsible personnel.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In our area we have enough water for our farming activities, but we do not have additional 30,000 m³ per day for drilling.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please add 30,000 m³ per day for drilling.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roads, water installations and fences.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please add No damage to farm infrastructure etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste management: please explicitly mention functional toilets and who must inspect at which intervals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Groundwater: Where possible, water from existing boreholes will be used. - Please change to For drilling Voluntaryism shall make provision for their own water sources.</td>
<td></td>
</tr>
</tbody>
</table>
### Feedback Received from I&APS from the Second Round of Public Consultation (Scoping Report Made Available)

<table>
<thead>
<tr>
<th>No</th>
<th>I&amp;AP / Stakeholder Comment Received</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thank you for incorporating most of my issues into the EMP.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The easier one: please make functional toilets mandatory for drill sites as well, not only camp sites.</td>
<td>27th February 2022</td>
</tr>
<tr>
<td>3</td>
<td>The higher risk of poaching, livestock and equipment theft is recognised, no mitigation to the poaching, livestock and equipment theft risks are addressed through the explicit requirements in the EMP, which is to address these points through access control measures and restricting all movements to areas of activities. Only the site manager or supervisor is allowed on premises.</td>
<td>27th February 2022</td>
</tr>
<tr>
<td>4</td>
<td>The use of functional chemical toilets on drill sites has been included on page 30 of 31 in the EMP.</td>
<td>27th February 2022</td>
</tr>
</tbody>
</table>

Peter Zensi
Farm Hamburg #504 via email
27th February 2022

Petro Zensi
Farm Hamburg #504 via email
27th February 2022

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The exploration activities are part of the portfolio, and Votorantim aim to perform exploration in the ground to initially evaluate the mineral potential. The exploration reports and more information about Nexa can be seen in the link below.

In addition, the impact of social discomfort and anxiety on farmers is addressed on page 78 of this report. The correlating mitigation is acknowledged in Table 3, which identifies that the presence of workers on private farmland is a sensitive issue and therefore states that the option to utilise farmland for exploration campsites should be discussed and agreed to by the farm owner first.

Before the start of exploration, the farmer receives a list with the names and attached certified copies of the ID’s of persons allowed on the premises. All other persons are charged for trespassing. I found staff from another drill site on my farm, drill foremen were exchanged without my knowledge, family members spent the day on site, mechanics come and go as they like, even a person from a completely different company was training Ferodrill mechanics on my farm. It cannot be said that obtaining an EPL turns my private farm into a public place where anybody does as he/she wishes.

The impact of social discomfort and anxiety on farmers is addressed on page 78 of this report. The correlating mitigation is described on page 22 of the EMP within Table 3.
2.7 **DRAFT EIA AND EMP**

This report and EMP for the Project’s environmental clearance includes an assessment of the biophysical and social environment, which satisfies the requirements of Step 5 (Figure 3). The EIA report documents the findings of the assessment process, provides stakeholders with the opportunity to comment and continue to engage in consultation and forms part of the environmental clearance application. The EMP provides measures to manage the environmental and social impacts of the proposed Project and outlines specific roles and responsibilities to fulfil the plan.

This EIA report focuses on the significant impacts that may arise from the proposed Project as described in Step 4 (Figure 3). These impacts are discussed in Chapter 7.

This EIA report was open to stakeholders and I&APs for consultation from the 9th to the 16th of November 2021. Thereafter the updated reports were circulated to I&APs between 18-25 November 2021 totalling 14 days. The report was again updated with comments from I&APs and circulated between (17/02/2021 - 04/03/2021) for a 14-day period, meeting the mandatory requirement of 7 days as set out in the Environmental Management Act, No. & of 2007 and its Environmental Impact Assessment Regulations, No. 30 of 2012. The aim of this stage was to ensure all stakeholders and I&APs have the opportunity to provide final comments on the assessment process and findings and register their concerns. However, none of the I&APs consulted throughout this process provided any new issues or concerns.

2.8 **FINAL EIA AND EMP**

The final EIA report and associated appendices will be available to all stakeholders on the ECC website [www.eccenvironmental.com](http://www.eccenvironmental.com) and MEFT portal. All I&APs will be informed via email.

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

2.9 **AUTHORITY ASSESSMENT AND DECISION MAKING**

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

2.10 **MONITORING AND AUDITING**

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

This chapter outlines the regulatory framework applicable to the proposed Project. Table 4 provides a list of applicable legislation and the regulatory requirements.

#### 3.1 NATIONAL LEGISLATION

Relevance to the Project: An environmental clearance is required for any activity listed under the Government Notice No 29 of 2012 of the EMA.

<table>
<thead>
<tr>
<th>National Regulatory Regime</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minerals (Prospecting and Mining) Act, No. 33 of 1992</td>
<td>Mining (Prospecting and Mining) Act, No. 33 of 1992</td>
</tr>
</tbody>
</table>

Table 4 - Legal compliance

<table>
<thead>
<tr>
<th>National Regulatory Regime</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minerals (Prospecting and Mining) Act, No. 33 of 1992</td>
<td>Mining (Prospecting and Mining) Act, No. 33 of 1992</td>
</tr>
</tbody>
</table>

The proposed activity is prospecting for minerals. Hence it requires an environmental impact assessment (EIA) in accordance with the Environmental Management Act and its regulations. This report presents the findings of the EIA.

The Proponent is committed to ensuring the welfare of the local community for the proposed Project by maintaining and managing the environment through best practice environmental standards and policies.

Section 50 (i) requires an environmental impact assessment (EIA) indicating the extent of any pollution of the environment before any mining operations are being carried out.
### National Regulatory Regime

**Environmental Management Act, (No. 7 of 2007) and its regulations; 2007 (No. 30 of 2012)**

The Act aims to promote sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment and the use of natural resources by establishing environmental and legal duties and obligations upon the holder of any permit or licence required under any laws and regulations of such mineral licence and the conditions of any such permit or licence. The holder of such permit or licence is subject to the conditions of the permit required under any laws and regulations of such mineral licence and the conditions of any such permit or licence.

### Environmental Impact Assessment

This environmental scoping report (and EMP) documents the findings of the environmental assessment undertaken for the proposed Project, which will form part of the environmental clearance application. The report has been prepared with a view to assessing the potential environmental impacts of the proposed Project and to determine whether the Project is likely to have significant environmental impacts. The report has been prepared in accordance with the requirements of the Environmental Impact Assessment Regulations, 2007 (No. 30 of 2012).
National regulatory regime

### Applicability to the Project

**Summary**

- **ECC Report No.: ECC-88-351-REP-06-D**
- **Votorantim Metals (Pty) Ltd**
- **MARCH 2022 REV 01 PAGE 37 OF 111**

The MEFT is responsible for the protection and management of Namibia’s natural environment. The Department of Environmental Affairs under the MEFT is responsible for the administration of the EIA process.

**Water Act, No. 54 of 1956**

- The Water Act provides for the control and conservation of water for domestic, agricultural, urban and industrial purposes. It makes provision for the prevention and control of soil erosion.
- Measures to minimize potential groundwater and surface water pollution are contained in the EMP.
- The Act stipulates obligations to prevent pollution of water. Should wastewater be discharged, a permit is required. The EMP sets out provisions relating to the discharge of wastewater.
- The Minister may issue a permit in terms of regulations 5 and 9 of the government notice R1278 of 23 July 1971, as promulgated under section 30(2) of the Water Act no. 54 of 1956.
- The Department of Water Affairs within the Ministry of Water Affairs, in accordance with the regulations of the Water Act, is responsible for the administration of the Water Act.
- Section 22 requires a permit for the entry of the permit for the clearing, reclamation, destruction or removal of vegetation that are classified under Part A or B of any Act.
- The planning process activities will include minimal vegetation clearing.
- The Forestry Act, No. 12 of 2001 as amended by the Environment Conservation Act, No. 38 of 1971 (as amended by the Soil Conservation Act, No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38 of 1971) makes provision for the prevention and control of soil erosion. This will be taken into consideration during the preparation of the EMP.
- The Forestry Act requires a permit for cutting, destruction or removal of vegetation that are classified under Part A or B of any Act.
- The planned Project activities will include minimal vegetation clearing.
- Soil Conservation Act, No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38 of 1971 make provision for the prevention and control of soil erosion. This will be taken into consideration during the EMP.

**Sections of the Act**

- **ECC Report No.: ECC-88-351-REP-06-D**
- **Votorantim Metals (Pty) Ltd**
- **MARCH 2022 REV 01 PAGE 37 OF 111**

**Summary**

The MEFT is responsible for the protection and management of Namibia’s natural environment. The Department of Environmental Affairs under the MEFT is responsible for the administration of the EIA process.
be used when heritage sites are discovered during the course of the project. Any unearthing of artefacts or the excavation of any cultural features will be reported to the National Heritage Council. Where such features are found, steps will be taken to preserve them and to ensure that they are properly documented.

Section 55 of the National Heritage Act compels exploration companies to report any archaeological findings to the National Heritage Council. A heritage permit needs to be issued before the find can be disturbed. In cases where heritage objects are found on site, the stipulations in the Act have been taken into consideration and are incorporated into the EMP. The Act provides for the protection and conservation of places and objects with heritage significance. Section 55 stipulates that exploration companies must report any archaeological findings to the National Heritage Council after which a heritage permit needs to be issued. In the unlikely event of heritage objects to be found on site, the ‘chance find procedure’ will be used. The Act provides for the protection and conservation of places and objects with heritage significance.

<table>
<thead>
<tr>
<th>National Regulatory Regime</th>
<th>27 Oct 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Heritage Act No. 27 of 2004</td>
<td>27 Oct 2004</td>
</tr>
<tr>
<td>Forest Amendment Act, No. 13 of 2005</td>
<td>27 Oct 2004</td>
</tr>
</tbody>
</table>

### Summary

<table>
<thead>
<tr>
<th>EPL 8127 Environmental Scoping Report Plus Impact Assessment</th>
<th>Voortamini Metals (Pty) Ltd</th>
<th>National Regulatory Regime</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Regulatory Regime</strong></td>
<td><strong>EPL 8127 Environmental Scoping Report Plus Impact Assessment</strong></td>
<td><strong>Voortamini Metals (Pty) Ltd</strong></td>
</tr>
</tbody>
</table>
Vision 2030 sets out the national development programmes and strategies to achieve the country’s long-term vision. It is a blueprint for inclusive economic growth and social development. The vision states that the overall goal is to improve the quality of life of the Namibian people, to reduce poverty, and to promote sustainable economic development and social transformation.

Table 5 - National policies

<table>
<thead>
<tr>
<th>National regulatory regime</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision 2030</td>
<td>The planned Project shall meet the objectives of Vision 2030 and support the achievement of the national objectives.</td>
</tr>
<tr>
<td>Minerals Policy</td>
<td>The objectives of the Minerals Policy are in line with the objectives of the Fifth National Development Plan (NDP5), i.e., reduction of poverty, employment creation, and economic empowerment. The proposed Project conforms to the policy, which has been introduced to ensure sustainable development and economic growth.</td>
</tr>
<tr>
<td>Labour Act, No. 11 of 2007</td>
<td>The proposed Project will comply with stringent health and safety policies, including the compulsory use of specific PPE in designated areas. Proper storage and labelling of hazardous substances are required. The Project will ensure employees in charge of and working with hazardous substances are trained.</td>
</tr>
<tr>
<td>National Development Plan</td>
<td>The planned Project shall meet the objectives of Vision 2030 and support the government’s objective of creating employment and economic empowerment.</td>
</tr>
<tr>
<td>Education</td>
<td>The planned Project supports meeting the objectives of NDP5, contributing to the overall development of the Namibian people.</td>
</tr>
</tbody>
</table>

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3.2 PERMITS, LICENCES, OBLIGATIONS

3.2.1 EXCLUSIVE PROSPECTING LICENCE

The EPL 8127 was granted on the 25th of March 2021 and expires on the 24th of March 2024. In terms of the Minerals (Prospecting and Mining) Act, No. 33 of 1992, an EPL may be renewed, however, it may only be extended twice for two-year periods if demonstrable progress is shown. Renewals beyond seven years require special approvals from the Minister (MME, 2018).

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

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

The permits and licences that may be relevant to the proposed projects are outlined in Table 6.

**Table 6 - Permits and licences requirements**

<table>
<thead>
<tr>
<th>Permit and licences</th>
<th>Relevant authority</th>
<th>Validity/duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water abstraction permits</td>
<td>Ministry of Agriculture, Water and Land Reform</td>
<td>Permit dependent</td>
</tr>
<tr>
<td>Exclusive prospecting licence</td>
<td>Ministry of Mines and Energy - Windhoek</td>
<td>3 years</td>
</tr>
<tr>
<td>Notice of intention to drill</td>
<td>Ministry of Mines and Energy - Windhoek</td>
<td>To be submitted prior to drilling</td>
</tr>
<tr>
<td>Effluent discharge permit</td>
<td>Ministry of Agriculture, Water and Land Reform</td>
<td>5 years</td>
</tr>
</tbody>
</table>

3.2.2 INTERNATIONAL OBLIGATIONS

The International Finance Corporation (IFC) is a member of the World Bank Group and is the largest global development institution focusing on the private sector in developing countries. Its standards have become a global benchmark for environmental and social performance. They form the basis for the Equator Principles (IFC, 2013), a voluntary environmental and social risk-management framework used by 77 financial institutions worldwide.
The Equator Principles are a framework and set of guidelines for evaluating social and environmental risks in Project finance activities and apply to all new Projects with a total capital cost of US$10 million or more, no matter what industry sectors, without geographic requirement.

The Equator Principles are not applicable to this specific Project.
4 PROJECT DESCRIPTION

4.1 NEED FOR THE PROPOSED PROJECT

The mining sector in Namibia significantly contributes to the country's Gross Domestic Product (GDP), government tax receipts and export revenues. For this reason, exploration activities are encouraged in Namibia and the vision of the Minerals Policy being to “further attract investment and enable the private sector to take the lead in exploration, mining, mineral beneficiation and marketing” supports mineral exploration and development.

The proposed Project is in line with this vision and has the potential to create employment in local communities in the Otjozondjupa Region. In the event that exploration activities are successful, and a resource can be defined, with commercially viable mineral concentrations, exploration operations can result in socio-economic development in the area.

4.2 ALTERNATIVES CONSIDERED

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

Exploration activities range from extremely low impact exploration such as remote sensing from satellites to more invasive methods such as extensive close-spaced drilling. The methods used shall be determined, based on the exploration programme, which is further designed once more information and data is obtained. At this stage of the Project, the exploration activities are yet to be finalised and therefore a range of options remain.

Once the exploration programme is further defined, the most suitable options and methods shall be identified to ensure the impacts on the environment and society are minimised.

4.2.1 NO-GO ALTERNATIVE

Should exploration activities within EPL 8127 not take place, the anticipated environmental impacts from exploration activities would not occur, however, the social and economic benefits associated with the Project would also not materialize.

There would not be an opportunity to define resources within the Project area, which would be a missed opportunity for geological mapping and data collection that typically adds to regional knowledge of Namibia's mineral wealth and, if found to be viable for mining, would benefit the Namibian economy.
4.3 EXPLORATION METHODOLOGY

All geological and geophysical work will be conducted by contractors. The schedule of activities is presented in Table 7.

**Table 7 - List of activities planned per phase**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Date</th>
<th>Activity description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: 2021</td>
<td>Field inspection commencement date unknown, desktop work commenced 2021:</td>
<td>Non-invasive Ground Penetrating Radar (GPR) will be done in the first three months</td>
</tr>
<tr>
<td>Phase 2: 2022</td>
<td>Actual commencement date unknown: During 2022.</td>
<td>RC drilling will then commence soon after for another three-month period. Further planning will take place after the results of drilling have been obtained. If results are favourable subsequent exploration will continue. However, if not, the sites will be rehabilitated and vacated.</td>
</tr>
</tbody>
</table>

The exploration activities on EPL 8127 will include some or all of the following methods: aerial or remote sensing, geological mapping, geochemical sampling, geophysical surveys and drilling. Details of these methods are described below. Ground-based exploration techniques are inevitable in the search of base, rare and precious metals. Data obtained by remote-sensing data are also used to select target areas.

Diamond drilling and possible Rotary Air Blast (RAB) drilling may occur and the number of holes and aerial extent will be determined by the geochemical and geophysical anomalies obtained. AMT (Audio MagnetoTelluric), IP and magnetic ground surveys shall be undertaken to measure chargeability, conductivity, and magnetic susceptibility of the rocks.

Existing tracks shall be used as far as reasonably practicable. In the event that new tracks are required they will be developed by hand or by use of a bulldozer, terrain dependent. Vegetation clearing will be limited to clearing for access tracks and site camps, should additional areas be cleared for exploration activities the Forest Act, No. 12 of 2001 and its regulations will be complied with (the relevant forestry permits will be applied for if required). Any established or large trees or specially protected plant species shall not be removed, and access tracks will be routed to avoid these wherever possible and permits will be obtained as necessary. Impacts and effects of the geochemical surveys and drilling programmes are likely to be low.

4.3.1 EXPLORATION SCHEDULE

The exploration activities are executed and managed from the Votorantim Exploration Office in Otavi. Field exploration activities, using techniques as discussed above, are anticipated to be carried out over the licence validity period. Remote sensing studies and planning phases for the prospecting programme will require 2-6 months. Geochemical sampling will be undertaken
concurrently with geological mapping for approximately 2-6 months. Geophysical surveys will then be carried out over a period of about two (2) months after which the Project will advance to reverse circulation or core drilling.

The duration of drilling programs is variable, and usually depends on the information that is gained from drilling. Applications for the environmental clearance certificate, along with all required permits will be submitted during this period should a renewal of the EPL be required.

### 4.3.2 EQUIPMENT AND MATERIALS

During the exploration phase double and single cab vehicles will be used to transport workers to, from and around the site. Field activities will be organized from Otavi. Contractor's camp infrastructure include tents and chemical toilets, which would be set up on site temporarily if agreed to by the land owner. A drill rig (track-mounted) will be brought to site for core drilling, along with a water truck and supporting equipment (rods truck, water and fuel bowsers, and RC compressor) for use during drilling. Drilling equipment, diesel fuel and consumables shall be brought to the exploration site to support exploration activities when needed.

### 4.3.3 POWER SUPPLY

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

### 4.3.4 WATER SUPPLY

Water will be required for various uses including human consumption during the planned exploration activities and to support any of the exploration activities such as diamond drilling. The water will most likely be sourced from an existing water source on site, after permission has been obtained from the farm owner, of which they will be compensated for water usage. There is generally no shortage of water in the Otavi area. No water will be needed for the first stage of exploration (i.e. soil sampling), 1m³/day water will be required for geophysical surveys in the second stage of exploration and approximately a volume of 30m³ / day of water may be required for diamond drilling in the third stage of exploration.

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

- Water for domestic use within field camps: 1m³ per day; and
- Water for exploration activities (drilling): 30m³.

Water can be sourced from two sources. These are:

**SOURCE 1:** Potable water will be brought to site. During drilling operations, water shall be used, recirculated, and stored in lined collections ponds. If deemed clean and suitable will be
discharged to the environment for evaporation or if not suitable for discharge will be transported to a local (Otavi/Otjiwarongo/Tsumeb) and suitable waste facility for safe disposal.

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

### 4.3.5 WORKERS AND ACCOMMODATION

Four to eight possible job opportunities are foreseen during the exploration phase and workers will be sourced from the nearest towns such as Otavi, Grootfontein and Otjiwarongo. The workers will be deployed at various stages of exploration including soil sampling, geological mapping, geophysical surveys, and drilling operations.

It is envisaged that for most of the exploration programme workers will reside in Otavi and be transported to and from the site. The Proponent will provide transport. However, during the latter part of the prospecting (drilling) workers may be required to stay at the exploration site in campsites or in existing housing rented from the property owner. The Proponent shall provide suitable living facilities during this period.

Should the Proponent consider setting up camps for the exploration team on site, precaution and safe use of flammable items should be adhered to. Although fire is unlikely and probably rarely caused by the residing exploration team, there is a growing concern from farmers/landowners regarding the occurrences of uncontrolled veld fire. In recent years, several farmers have suffered severe losses due to a series of devastating veld fires that occurred, losing hectares of grasslands and cattle consisting of goats and sheep. Mitigation measures have been included in the EMP, which shall be ensured and utilized by the Proponent. Accommodation options for exploration personnel on site should always be done in consultation with the affected landowner and captured within the land access agreement.

### 4.3.6 SOLID WASTE MANAGEMENT

Waste produced on site will include solid waste such as packaging material and field camps household waste. The solid residue remaining from wastewater will be buried in the soil if not toxic. Hazardous waste if any, such as (hydrocarbon contaminated soil, etc.) will be disposed of at the Walvis Bay municipal landfill site. The drill-sludge is disposed of at the Otavi municipal waste disposal site. The Proponent should ensure waste is collected in categorized bins and that the waste hierarchy of (reduce, reuse, and recycle) is practised as practically as possible.

### 4.3.7 WASTEWATER EFFLUENT

Wastewater will be diverted into a lined sump to evaporate. Wastewater (e.g. water with drill additives) used during drilling is recycled, contained and allowed to evaporate after use. Sewerage
may as well, be produced on site and in the case of provision of the mobile toilets to be used on site, sewerage generated shall be managed by the toilet contractor. Wastewater that is discharged into the environment must comply with wastewater discharge specifications.

4.3.8 REHABILITATION

Once exploration activities are completed the areas shall be rehabilitated to a condition as close to the original state as far as possible. Rehabilitation shall be determined during the exploration programme and shall be agreed with the landowners and authorities as per legislation (discussed in Section 3). Before and after photographs will be used to monitor rehabilitation success. The Proponent has committed to restoring any historic exploration disturbance on the site if identified.
5 BASELINE / CURRENT BIOPHYSICAL ENVIRONMENT

This section provides an overview of the existing biophysical environment through the analysis of the baseline data regarding the existing natural and socio-economic environment. Desktop studies on the national database are undertaken to provide current information on the status of the receiving environment. This provides a baseline against which changes due to the proposed Project can be measured.

5.1 CLIMATE

EPL 8127 is located in a part of Namibia which receives higher rainfall than the rest of the country, between 500 and 600 mm of rain per year, with a variation coefficient of less than 30%. Rainfall events are limited to the summer months, mainly between October and April, in the form of thunderstorms often associated with heavy downpours. Potential evaporation is between 1,680 and 1,820 mm per year, meaning an average water deficit of between 1,500 and 1,700 mm per year. Relative humidity is low, rarely more than 20% in winter but may reach 85% in summer before or after thunderstorm build-up. Maximum temperatures average around 32 - 34°C, mainly recorded during the afternoons between November and January, while minimum temperatures are around 6 - 8°C and are normally recorded during nights in June and July. Deviations from these averages are common, with the highest temperatures reaching 38 - 40°C and the lowest temperatures below 6°C. Occasional frost can occur (Mendelsohn et al., 2002).

Due to the rhythm of the pressure systems, the wind patterns over the interior remain fairly predictable. Prevailing wind over EPL 8127 is expected to be from the east and northeast, with occasional airflow from the southeast and southwest. Wind speed is expected to be low with more than two-thirds of the time lower than 2 m/s. The stronger air movements during the afternoons and evenings are the result of the ground being heated more in some places than others, in combination with the orographic effect of the mountains. During the winter months wind speed is slightly higher (Mendelsohn, et al., 2002).

Strong easterly winds blow for several days a year in Namibia, mainly in spring. These are known as Berg Winds. They are hot and dry and result in a considerable increase in fire hazard ratings.

Predominant wind direction is from the east, with an average wind speed of 2.4 mps (meters/second), and a calm of 11.1% (Figure 5) (Iowa State University, 2021).
5.2 GEOLOGY AND GEOMORPHOLOGY

The local geology of the entire EPL 8127 comprises units of the Swakop Group which forms part of the Damara Sequence (850 to 600 million years) (Figure 6). The Damara Supergroup covers the largest part of the northwest quarter of Namibia and is oriented in a predominantly SW-NE direction with an extension into what is known as the Otavi Mountains (Mendelsohn et al, 2002). The geology rock type of the proposed Project area is composed mostly of dolomites and schist.

The dolomites of the Swakop/Otavi Group crop out in a series of east-west striking ridges that constitutes the Otavi Mountains. The origin of the Otavi Mountains is associated with the ancient sea between the Congo and Kalahari Cratons. Over millions of years a lime and dolomite rock mass of up to 5,000 m thick was formed, which was pressed upwards and folded intensely as the...
result of a collision between two cratons (mainlands) approximately 650 million years ago. Large-scale mining of base metals, especially copper, plays an important role in the economy of the country. Copper occurs at several locations but is dominated by the Damara deposits: Otavi Mountainland (including the defunct Tsumeb Mine) and the Swakop lithologies (mainly schist, with Matchless Amphibolite Belt of the Swakop Group) (Miller et al, 2008). The Kombat area is also known for its high base metal potential, which are mainly copper, lead, zinc, silver, and vanadium.
5.3  **TOPOGRAPHY AND SOIL**

EPL 8127 is located at elevation 1,507 to 1,520 meters above mean sea level (Figure 7). The landscape is mostly flat with some sharp topographical contrasts. Generally, there is a rise in elevation from west to east and from north to south, with the highest readings to the northwest of the EPL.

The Vertic Cambisols is the dominant soil type near the mountainous and northwest of the EPL. Cambisols are characterized by the absence of a layer of accumulated clay, humus, and soluble salts. Therefore, these soils are recent and the parent material is only slightly weathered. They are fairly fertile, these soils have a good water-holding capacity and internal drainage (Mendelsohn et al, 2002). Although fine and silty, the soil occasionally contains coarse, medium, and fine grained sub-rounded calcrete nodules. The sources of dust associated with the proposed exploration activities are land clearing and creation of access roads. The Kombat area lithology consists mainly of sandstone, quartzite, limestone, dolomite (Christelis and Struckmeier, 2001).
Figure 7 - Elevation profile along 8127

Elevation profile along 8127
EPL 8127 is largely covered by the regosol soil group (Figure 8). Regosols are medium- or fine textured soils of actively eroding landscapes. They form thin layers lying directly above the rock surface from which they are formed. The central regions of the country are dominated by regosols, which are especially susceptible to erosion where there is any degree of slope. Vegetation cover on these thin soils is generally sparse because they cannot provide most plants with sufficient water or nutrients. Areas with regosols can support low-density stock farming or wildlife (Mendelsohn et al, 2002).
Figure 8 - EPL 8127 Regional and Local Soil Map
5.4 HYDROLOGY

The Otavi Mountains form part of a karst landscape, which means that well-defined surface drainage systems are absent, or follow only short distances before surface water penetrates the surface. Although a drainage pattern can be identified, the flow of surface water is more defined by topographical valleys than the presence of streambeds. Many karst features occur in the Otavi Mountain Lands due to the dissolution of limestone and dolomite along joints and fractures that have provided a passage for water. Dissolution features can result in springs, where an underground “stream” intersects the ground surface, and caves.

The Kombat mine which is within the Otavi Mountains via the Grootfontein - Omatako Canal supplies dolomite groundwater to the Okakarara treatment plant, as part of the Eastern National Water Carrier (ENWC). The Kombat area aquifers and aquitards hydrogeological character is characterized as Mulden Group Aquitard which are fractured and partly confined. The groundwater quality and vulnerability is saline to slightly brackish at shallow depth (Christelis and Struckmeier, 2001).

5.4.1 GROUNDWATER

Some of the groundwater abstracted from the mine at Kombat is purified for drinking water purposes. The water, regularly tested by NamWater, is suitable for drinking. The groundwater is sufficiently buffered to prevent heavy metals from the mines dissolving to any harmful extent despite the relatively high proportion of oxidised ore (Christelis and Struckmeier, 2001). The farms located within and nearby EPL 8127 obtain water from borehole abstraction. There are more than 10 boreholes within the EPL 8127 area. It is assumed that water will be obtained from some of these existing boreholes during the exploration activities. Considering the nature and scale of the proposed exploration, drilling is unlikely to impact groundwater. There is no water shortage around the Project area, however, should the Project require the drilling and abstraction of water from an additional borehole, an application must be submitted to the MAWLR.

5.4.2 GROUNDWATER FLOW

EPL 8127 is located mainly in the Kunene South Groundwater Basin (Figure 9). Groundwater flow in the area is along fractures and contact zones within hard rock formations. Groundwater in the area flows in a northwesterly direction as inferred from historical groundwater data (Christelis and Struckmeier, 2001). The area is underlain by dolomites, which show a high potential of groundwater with an increased potential where fractures and faults occur on a local scale. The aquifer is reliable, as it is frequently recharged and water quality is generally of a high standard (Mendelsohn et al., 2002).
Figure 9 - Hydrology map of the EPL 8127
5.5 **BIODIVERSITY**

5.5.1 ** VEGETATION **

The EPL area is covered by the Thornbush shrubland vegetation type (Figure 10). It is broadly classified as a dense shrubland vegetation structure, with vegetation dominated by relatively dense stands of woody shrubs and trees. In some places plant growth becomes progressively shrubby, especially where the soils are shallower, slopes are steeper and where it is hillier and rockier. Most of the woody vegetation varies between one and three metres in height. Thorny Acacia species dominate but several species are closely associated with the higher elevations only. Thornbush thickets dominate on the sandy parts and calcrete-rocky parts (Mendelsohn et al, 2002).

A variety of savanna type vegetation covers most of the Namibian lands, of which the thornbush and mountain savannahs are the most dominant ones to occur in the central highlands. Less water infiltrates during the growing season when vegetation cover is denser and plants take up water for growth and transpiration (Christelis and Struckmeier, 2001). Grazing resources are made up of a wide variety of grass species, which vary widely in palatability and in their abundance. Large parts of the farmland on and around EPL 8127 are marked by bush encroachment, mainly as a result of long continuous periods of selective grazing by livestock. The encroachment has led to a decreased carrying capacity on many farms and the invader bush is managed in several ways as a result, one of which is the production of charcoal for export.

Plant diversity is estimated at >500 species (Mendelsohn et al, 2002), although local differentiation as a result of topography and the availability of water is possible. This is the highest occurrence of plant diversity in Namibia. Biophysical baseline information does not accentuate the uniqueness of mountain vegetation suggesting the diversity of plant species may be restricted to relatively small areas in which there are several habitats and niches offered by micro-climate, elevation, and sheltered spaces.
Figure 10 - EPL 8127 Regional and Local Vegetation Map
5.5.2 FAUNA SPECIES

Overall terrestrial biodiversity of the Otavi Mountains ranges from medium to high. The number of mammal species ranges between 61 and 75, the number of bird species is between 201 and 230, with 71 – 80 reptile species, 12 – 15 frog species and 10 – 11 scorpion species that could be expected (Mendelsohn et al, 2002). High bird diversity reflects the presence of a greater range of habitats compared with surrounding areas. The vegetation of the Otavi Mountains in combination with the higher elevation support many birds that are absent from the surroundings. On a local scale it is expected that diversity increases with the increase in habitats, which is closely coupled to shelter, food and water availability and migration routes. The micro-climate associated with an increase in elevation plays a prominent role in this regard and is directly related to the increase in terrestrial diversity, and the relative abundance of water in the area.

The dominant land use within and on the surroundings of the EPL is extensive agriculture, in particular large livestock farming and to a lesser degree crop production. For crop production some farmers apply irrigation, mainly to produce fresh vegetables, while some farmers rely on the higher rainfall to produce maize.

5.6 SOCIO-ECONOMIC BASELINE

The Otjozondjupa Region where EPL 8127 is located, is one of the bigger region of Namibia and is located in the northern half of the country, bordering the Khomas and Omaheke regions in the south, the Erongo and Kunene regions in the west and the Oshikoto, Kavango-West and Kavango-East regions in the north. In the east the region stretches along the international border with Botswana. The area is well-known for the Waterberg Plateau Park and cattle farming activities.

5.6.1 DEMOGRAPHIC PROFILE

Namibia is one of the least densely populated countries in the world (2.8 persons per km2). Vast areas of Namibia are without people, in contrast to some fairly dense concentrations, such as the central-north and along the Kavango River. Windhoek, the capital, functions as a primate city – not only is it the urban area with the biggest population, but the concentration of private and public head offices attracts Namibians from all parts of the country in search for a better life. National population growth rate is estimated at less than 2%, lower than most African countries. Namibia's population is young - although 57% falls in the age group 15 – 59, 37% of the total population is younger than 15 (NSA, 2017). Since 2005 there has been a steady improvement in life expectancy, currently estimated at 65 years. In 2018 it was estimated that 50% of all Namibians are urbanized, in other words living in an urban settlement (retrieved from www.worldpopulationreview.com). The last national census was conducted in 2011 and counted 2.1 million Namibians. An intercensal demographic survey was conducted in 2016 and estimated the total population at 2.3 million (NSA, 2017).
The population density of the Otjozondjupa Region is low (1.5 persons per km²) when compared to the national average, and the current total population of the region was estimated at 154,342 in 2016 (NSA, 2017). In 2011 the population of Otjiwarongo was 28,249 and with a generalized urbanization growth rate of 4.0% the current estimated population is estimated to be 40,200 residents. Otavi is smaller, recording only 5,200 residents in 2011 and an estimated population of 7,400 in 2020. Grootfontein had a population of 23,793 in 2011 and with the generalized urbanization growth rate of 4.0% the current estimated population is estimated to be 33,864 residents. Kombat, at its peak, had over 1,000 residents. The settlement was almost abandoned when mining operations ceased, however due to the functional services which include a primary school, clinic, police station, a nursing training centre and postal office, the livelihood of the settlement remained at bay.

5.6.2 GOVERNANCE

Namibia is divided in 14 regions, subdivided by 121 constituencies. Otjozondjupa Region is divided into seven constituencies. Each region has a regional council, elected during regional elections per constituency.

The population density of the Otjozondjupa Region is much lower than the national average and the current total population of the region is projected at 160,100 (retrieved from www.citypopulation.de). Otjiwarongo is the capital and also the largest town of the Otjozondjupa Region. Many of the region’s head offices are located in the town. Other towns of the region are Grootfontein, Otavi, and Okakarara.

Ordinarily in Namibia the management of towns falls under the jurisdiction of national, regional, or local government authorities in the form of municipalities. However, for some mining towns it is different. Relevant to EPL 8127 the closest community, which is Otavi, is governed through a local authority. Otavi is governed by a town council, its economy relies on small businesses and many surrounding game/cattle farms, as well as on visitors passing through to the northern and southern parts of the country. While Kombat has historically been under private administration of the respective mine owners. The owners provide basic necessities for residents of the Town. These include housing, transport, medical service, and recreation. Some nearby tourism attractions include the Gaub Caves and the Hoba Meteorite, which will not be affected by exploration activities (Info-Namibia, 2020).

5.6.3 HEALTH

Since independence in 1990, the health status of Namibia has increased steadily with a remarkable improvement in access to primary health facilities and medical infrastructure. Despite the progress, the World Health Organization (WHO) in 2015 recommended strategic priorities of the health system in Namibia which include improved governance, an improved health information system, emergency preparedness, risk reduction and response, preventative health care and the combating of HIV/AIDS and TB (WHO, 2016).
HIV/AIDS remains a major reason for low life expectancy and is one of the leading causes of death in Namibia. There is a high HIV prevalence among the whole population, but since the peak in 2002 (15,000 new cases of HIV per year, and 10,000 yearly deaths due to AIDS) the epidemic started to stabilise (UNICEF, 2011). Although new infections as well as fatalities halved during the next decade, life expectancy for females returned to pre-independence levels but for males it did not reach pre-independence levels yet. HIV/AIDS remains the leading cause of death and premature mortality for all ages, killing up to half of all males and females aged 40 - 44 years in 2013 (IHME, 2016).

Tuberculosis (TB) is a leading killer of people infected by HIV/AIDS, and Namibia has a high burden – in 2018, 35% of people notified with TB were infected with HIV. The country is included among the top 30 high-burden TB countries in the world, with an estimated incidence rate of 423 per 100,000 people and 60 fatalities per 100,000 people in 2018 (retrieved from www.mhss.gov.na).

Over the period 2000 – 2013 significant rises were observed for stroke, ischemic heart diseases, diabetes, and depressive disorders, but HIV/AIDS remained the top cause of premature mortality. Over the same period significant decreases were observed for diarrheal diseases, neonatal conditions, and malaria. Risk factors are key drivers of premature mortality, and social ills were identified as the leading factor for death – particularly unsafe sex and alcohol and drug abuse. TB and malaria are compounded by the AIDS epidemic, and the risk of contracting malaria and TB is 15% greater if a person is also infected with HIV, with a risk of 50% higher to die as a result (IHME, 2016).

As of the beginning of 2020 the coronavirus disease (COVID-19), a communicable respiratory disease, has caused illness in humans at a pandemic scale and has resulted in an increasing number of deaths worldwide. The viral outbreak is adversely affecting various socio-economic activities globally, and with reports of the increasing number of people testing positive, it is anticipated that this may have significant impacts on the operations of various economic sectors in Namibia too. The disease caused many countries to enter a state of emergency and lockdown mode, with dire economic consequences.
5.6.4 EMPLOYMENT

Otjozondjupa labour force participation rate was more than 76.8%, compared to the average of 71.2% for Namibia. More than half of the people were employed in the private sector and about one-quarter by the State. Agriculture is the economic sector with the most employees – about 30%, while 40% of those employed fell in the occupational group of general labourers and other unskilled occupations. Wages and salaries represented the income source of 61.7% of households (NSA, 2018). The whole region was marked by low education levels, which affected employability and prevented many households from earning a decent income. More than 60% of the population is over 15 years of age and about one-third of the total population can be regarded as part of the labour force.

The unemployment rates in Namibia, particularly among the youth are high. According to the Namibia Labour Survey (2018), the unemployment rate of the Otjozondjupa Region was 36.1%, while the unemployment rate for people between 15 and 34 years of age was 47.4% in 2018, slightly higher than the national average of 46.1% (Namibian Statistics Agency, 2018).

In 2018, 53.4% of all working Namibians were employed in the private sector and 21.5% by the state. State-owned enterprises employ 7.6% Namibians and private individuals 16.6%. Wages and salaries represented the main income source of 47.4% of households in Namibia. Agriculture (combined with forestry and fishing) is the economic sector with the most employees – 23% of all employed persons in Namibia work in this sector. Agriculture is also the sector that employs the most informal workers in Namibia, calculated at 87.6%. Wages of employees in the agriculture sector are lower than all other sectors except for workers in accommodation and food services and domestic work in private households (NSA, 2019).

Low education levels affect employability and prevent many households from earning a decent income. Of all people employed in Namibia, 63.5% are qualified to lower than junior secondary level (Grade 10 and lower). In total 11.8% of all people employed had no formal education. In total 29.1% of all people employed fall in the category “elementary occupation” and 15.2% in the category “skilled agriculture” (NSA, 2019).

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

The economy of the Otjozondjupa Region is predominantly agriculture-based. Extensive livestock farming forms the livelihood of many people and is one of the reasons for the low intensity land use over much of the 105,460 km² the region covers, the total low population of (154,342 in 2016) as well as the low population density (about 1.5 persons per km²). Large parts of the region are covered by commercial and communal farms, mainly for cattle ranching. Guest farms and hunting farms are also common.

On both commercial and communal land, bush encroachment decreased the carrying capacity of the farms markedly over the last four decades. The invader bush is managed in several ways, one of which is the production of charcoal for export.

Mining plays a pivotal role in the economy of Namibia. Since independence, it has consistently been the biggest contributor to Namibia’s economy in terms of revenue and accounts for 25% of the country’s income. Mining is one of the main contributors to GDP, and one of the largest economic sectors of Namibia. The main commodities are uranium, gold, diamonds, copper, zinc, lead, salt and dimension stone. Also, a major employer, about 1.7% of the formal labour force of Namibia is directly employed by the mining sector.

Employees in mining receive the highest wages by industry (NSA, 2019). The multiplying effect of income from employment in the mining sector is also significant - not only is it estimated that each employed person provides for four other persons, but the mining industry contributes in various ways to the national economy by means of taxes and royalties, a strong service-support base and specialized contractors. Several mining activities emerged in the Otjozondjupa Region during the last decade and had a strong influence on the regional demography and economy - not only as a result of the establishment of the Otjikoto Gold Mine of B2Gold between Otavi and Otjiwarongo, but also as a result of other mining projects such as Okoruso, Okanjande, the Whale Rock cement factory of Cheetah Cement near Otjiwarongo and Ohorongo Cement near Otavi. In Tsumeb the smelter of Dundee Precious Metals Tsumeb (Pty) Ltd is also an influencer in the sector.

Several new government offices have been established in Otjiwarongo town as the regional capital. Other factors that influenced the socio-economy of the region, is the continuous growth of the tourism industry as well as the growing importance of the charcoal industry. Combined, all these factors had a cumulative role in the changing land use patterns and socio-economic landscape of the region (and the nearby towns and communities), which can only be quantified when comparisons from the next national census with the 2011 census are possible.

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

In Namibia several mountains are closely coupled to heritage values, and it is possible that this applies to the Otavi Mountains as well. For many years the mineral deposits of the mountains were known, and copper was mined at Kombat. It is possible that the mountains were inhabited or visited before the times of recorded history, simply based on the significance of its known mineral deposits. In addition, the Otavi Mountains are known for the occurrence of fossils, which makes it possible that more of these sites may be discovered.

A review of the National Heritage Council database was conducted, and no known heritage sites were identified on EPL 8127. In cases where heritage sites are discovered the “chance find” procedure will be used. If any historical or heritage sites(s) of importance on or around the Project area are encountered during exploration activities these will be reported to the Monument's Council in Windhoek, and the site will be left untouched.

5.6.7 NOISE AND SENSE OF PLACE

EPL 8127 is located where the predominant land use is extensive subsistence farming with the only signs of human influence is in the form of agricultural infrastructure, i.e. water installations, fences, tracks and buildings. Sensitive receptors associated with the EPL area may include farm owners and farm workers, visitors and tourists and neighbours.

The naturalness of the area can be disrupted by the combined and amplified effects of exploration activities – in the form of noise, dust, movements of heavy machinery, landscape scars and visual obtrusions. This may alter and affect the lifestyle of receptors, although the exploration activities are short-term and reversible.

EPL 8127 lies over 8 farms, and it is likely that the noise from the increased movement of people in the area will become a nuisance to farmers / residents of the area. The Proponent will continue to communicate with the farm owners, should this be a pertaining issue, and further mitigation measures shall be applied.

Additionally, work will be planned in advance and an agreement will be met with the farm owners on the most suitable timing of work and amelioration noise during drilling activities.
6 IDENTIFICATION AND EVALUATION OF IMPACTS

The key stage of the EIA process is the impact prediction and evaluation stage. This stage is the process of bringing together Project characteristics with the baseline environmental characteristics and ensuring all potentially significant environmental and social impacts are identified and assessed. Impact prediction and evaluation involve envisaging the possible changes to the environment as a result of the proposed Project. The recognized methodology was applied to determine the magnitude of impact and whether or not the impact was considered significant and thus warrant further investigation. The assessment considers all stages of the Project’s life cycle that is scoped into the assessment and is presented in this report. It is an iterative process that commences at Project inception and runs through to the final design and Project implementation (exploration). The impact prediction and evaluation stage were undertaken in September 2021 and the findings of the assessment are presented in this document.

6.1 INTRODUCTION

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

This chapter provides the following:

- Details on the assessment guidance used to assess impacts;
- Lists the limitations, uncertainties and assumptions with regards to the assessment methodology;
- Details how impacts were identified and evaluated, and how the level of significance was derived; and
- Details how mitigation was applied in the assessment and how additional mitigation was identified.
Figure 11 – ECC's impact prediction and evaluation process
6.2 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

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

- Topic specific assessment guidance has not been developed in Namibia. A generic assessment methodology was applied to all topics using IFC guidance and professional judgement;
- Guidance for CIA has not been developed in Namibia, and a single accepted state of global practice has been established. The IFC's guidance document (International Finance Corporation, 2013) has been used for the CIA.

Several limitations and uncertainties were acknowledged during the ESIA process. In line with EIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed. Table 8 contains the assumptions and uncertainties identified during the assessment process.

Where uncertainties exist, a cautious approach has been applied, allowing the worst-case scenario for potential impacts to be identified. Where limitations and uncertainties exist, assumptions have been made and applied during the assessment process.

Table 8 - Limitations, uncertainties, and assumptions

<table>
<thead>
<tr>
<th>Limitation / uncertainty</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of access roads and temporary drill campsites</td>
<td>The making of new tracks or access roads will be avoided, and existing tracks and routes will be used as far as possible. While every effort will be made to minimize environmental damage, in some cases it will be necessary to clear some bush to create small roads, which may be required for equipment to reach the site and for temporary campsites. If needed, cut lines have to be created by clearing of vegetation to have access to some parts of the EPL.</td>
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<tr>
<td>The program of exploration works is not confirmed</td>
<td>It is assumed that exploration work shall take a couple of months with two-to-three-week sampling Project as at different times on different sites and with follow-up exploration drilling Project s possible. Activities involve drilling; aerial or remote sensing; geophysical surveys; and mineral sampling. Pitting and trenching are unlikely.</td>
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<tr>
<td>Number of workers, area they will come from and accommodation</td>
<td>It is planned that approximately four to eight people will be contracted for the proposed Project . Most of the employees will stay in Otavi; contractors may camp on exploration sites / farms, depending on approval of farm owners.</td>
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</tbody>
</table>
7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MEASURES

This section sets out the overall approach that was adopted to assess the potential environmental and social impacts associated with the Project. To fully understand the significance of each of the potential impacts, each impact must be evaluated and assessed.

7.1 SCOPING ASSESSMENT FINDINGS

When undertaking the scoping exercise, the design of the proposed Project and best practice measures were considered to ensure the likely significant effects and any required additional mitigation measures were identified. A summary of the potential impacts and mitigation and/or control measures are discussed below. The following topics were considered during the scoping phase:

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

Table 9 sets out the findings of the scoping assessment phase. Activities that could be the source of an impact have been listed, followed by receptors that could be affected. The pathway between the source and the receptor has been identified where both are present. Where an activity and/or receptor has not been identified, an impact is unlikely, thus no further assessment or justification is provided. Where the activity, receptor and pathway have been identified, a justification has been provided documenting if further assessment is required or not required.

Due to the nature and localised scale of the exploration activities, and the environmental context of the site, the potential environmental and social effects are limited and unlikely to be significant. The only area where uncertainty remained during the scoping phase was the potential effects on human receptors from the increase in noise levels and visual impacts, namely residents in the near farmhouses. Further consideration of the potential effects on humans was therefore undertaken and results are presented in the next section.
<table>
<thead>
<tr>
<th>DESCRIPTION OF ACTIVITY</th>
<th>RECEIVER</th>
<th>EFFECT/DESCRIPTION OF MAGNITUDE OF SENSITIVITY</th>
<th>IMPACT MANAGEMENT/CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site operations such as maintenance activities, loss of containment, accidental fuel/hydraulic fluid leaks and spills, or similar sources.</td>
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<td>Groundwater quality</td>
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<td>Hydrocarbon leaks</td>
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<td>Adverse effects</td>
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<td>Likelihood of contamination and spills</td>
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<td>Site operations</td>
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<td>Groundwater quality</td>
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<td>Hydrocarbon leaks</td>
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<td>Adverse effects</td>
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<td>Likelihood of contamination and spills</td>
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<td>Site operations</td>
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<td>Hydrocarbon leaks</td>
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<td>Adverse effects</td>
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<td>Likelihood of contamination and spills</td>
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</tbody>
</table>

Table 9 - Scoping assessment findings and proposed mitigation measures
<table>
<thead>
<tr>
<th>Risk</th>
<th>Magnitude of change</th>
<th>Significance of impact</th>
<th>Reversibility of impact</th>
<th>Likely scenarios</th>
<th>Mitigation measures</th>
<th>Receptor</th>
<th>Description of impact</th>
<th>Activity of mitigation measures</th>
<th>Impact of management/control</th>
<th>Value of sensitiveness</th>
<th>Description of magnitude of impact</th>
<th>Description of scenario and mitigation measures</th>
<th>Description of management and maintenance activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor (4)</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Likely</td>
<td>Regional</td>
<td>Extraction volumes of water into sumps to direct any accidental spills.</td>
<td>Wastewater discharges will be contained.</td>
<td>Groundwater spills can enter the aquifer.</td>
<td>Indirect, reversible, partly reversible</td>
<td>Consider alternative sites when water table is too high.</td>
<td>Wastewater will be discharged in areas with adequate precipitation or non-penetrated contaminiated.</td>
<td>Medium</td>
<td>Minor (4)</td>
<td>Ensure drill pads and spill kits are in place.</td>
</tr>
<tr>
<td>Minor (4)</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Likely</td>
<td>Regional</td>
<td>Extraction volumes of water into sumps to direct any accidental spills.</td>
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<td>Consider alternative sites when water table is too high.</td>
<td>Wastewater will be discharged in areas with adequate precipitation or non-penetrated contaminiated.</td>
<td>Medium</td>
<td>Minor (4)</td>
<td>Ensure drill pads and spill kits are in place.</td>
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<tr>
<td>Low (1)</td>
<td>Minor</td>
<td>Minor</td>
<td>Likely</td>
<td>Regional</td>
<td>Extraction volumes of water into sumps to direct any accidental spills.</td>
<td>Wastewater discharges will be contained.</td>
<td>Groundwater spills can enter the aquifer.</td>
<td>Indirect, reversible, partly reversible</td>
<td>Consider alternative sites when water table is too high.</td>
<td>Wastewater will be discharged in areas with adequate precipitation or non-penetrated contaminiated.</td>
<td>Medium</td>
<td>Minor (4)</td>
<td>Ensure drill pads and spill kits are in place.</td>
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<tr>
<td>Law (2)</td>
<td>Description of Activity</td>
<td>Receiver</td>
<td>Description of Impact</td>
<td>Magnitude</td>
<td>Significance</td>
<td>Change of Impact</td>
<td>Sensitivity</td>
<td>Effect/Effectiveness</td>
<td>Mitigation/Management</td>
<td>Impact on Mitigation</td>
<td>Value of Mitigation</td>
<td>Mitigation after Mitigation/Control</td>
<td>Residual Impact</td>
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<td></td>
<td>Induction through toolbox talks and training and awareness</td>
<td>Minor (4)</td>
<td>Minor</td>
<td>Medium</td>
<td>Adverse</td>
<td>Reversible</td>
<td>Significant</td>
<td>Moderate</td>
<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<td></td>
<td>Training and awareness</td>
<td>Minor</td>
<td>Minor</td>
<td>Medium</td>
<td>Adverse</td>
<td>Reversible</td>
<td>Significant</td>
<td>Moderate</td>
<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<td></td>
<td>Inadequate management of hazardous and non-hazardous waste</td>
<td>Minor (4)</td>
<td>Minor</td>
<td>Medium</td>
<td>Adverse</td>
<td>Reversible</td>
<td>Significant</td>
<td>Moderate</td>
<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<td></td>
<td>Inadequate management of hazardous waste</td>
<td>Minor (4)</td>
<td>Minor</td>
<td>Medium</td>
<td>Adverse</td>
<td>Reversible</td>
<td>Significant</td>
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<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<td></td>
<td>Inadequate management of non-hazardous waste</td>
<td>Minor (4)</td>
<td>Minor</td>
<td>Medium</td>
<td>Adverse</td>
<td>Reversible</td>
<td>Significant</td>
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<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<td></td>
<td>Wastewater discharge</td>
<td>Minor (4)</td>
<td>Minor</td>
<td>Medium</td>
<td>Adverse</td>
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<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<td></td>
<td>Water pollution</td>
<td>Minor (4)</td>
<td>Minor</td>
<td>Medium</td>
<td>Adverse</td>
<td>Reversible</td>
<td>Significant</td>
<td>Moderate</td>
<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<td>Soil pollution</td>
<td>Minor (4)</td>
<td>Minor</td>
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<td>Adverse</td>
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<td>Good housekeeping</td>
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<td></td>
<td>Air pollution</td>
<td>Minor (4)</td>
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<td>Adverse</td>
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<td>Linear and regionally</td>
<td>Good housekeeping</td>
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<tr>
<td>DESCRIPTION OF ACTIVITY</td>
<td>RECEPTOR Description of Impact</td>
<td>IMPACT MANAGEMENT/control Measures</td>
<td>SIGNIFICANCE of IMPACT</td>
<td>Magnitude of IMPACT</td>
<td>CHANGE of IMPACT</td>
<td>SENSITIVITY VALUE of MAGNITUDE</td>
<td>EFFECT/DESCRIPTION of IMPACT</td>
<td>RECIPIENT Description of ACTIVITY</td>
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<td>Vegetation clearing for access routes, drill pads and temporary contractors camp</td>
<td>Low (1)</td>
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<td>Minor (4)</td>
<td>Minor</td>
<td>Medium</td>
<td>Moderate</td>
<td>Direct</td>
<td>Vegetation clearing</td>
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<td>Terrestrial ecology and biodiversity</td>
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<td>Loss / alteration of terrestrial habitats and loss of species</td>
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<td>Terrestrial biodiversity and loss of species</td>
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<td>Hydrocarbon waste disposal</td>
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<td>Waste segregation and correct waste collection</td>
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<td>Implementation of hazard (domestic)</td>
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<td>Implementation of hazard (hydrocarbon)</td>
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<td>Mitigation of access to new roads for use existing roads for travel</td>
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<td>Use resident roads for travel</td>
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<td><strong>Note:</strong> Action should only be taken when necessary.</td>
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</tbody>
</table>

**EPL 8127 Environmental Scoping Report Plus Impact Assessment**
<table>
<thead>
<tr>
<th>Activity</th>
<th>Magnitude of change</th>
<th>Significance</th>
<th>Value of magnitude</th>
<th>Effect of magnitude</th>
<th>Direct effect on receptors</th>
<th>Indirect, residual, or aesthetic effect on receptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (2)</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Medium</td>
<td>Likely</td>
<td>Direct effect</td>
<td>Residual impact after mitigation measures</td>
</tr>
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<td></td>
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<td></td>
<td>Ambient noise as a result of movement</td>
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</tbody>
</table>

**Ambient noise as a result of movement**: Through the use of machinery and movement (also through the use of airborne equipment).
<table>
<thead>
<tr>
<th>Magnitude of change</th>
<th>Significance of impact</th>
<th>Impact management/control measures</th>
<th>Residual mitigation measures</th>
<th>Description of impact</th>
<th>Description of impact post mitigation</th>
<th>Recover</th>
<th>vegetation with natural disturbance of terrestrial ecology and biodiversity</th>
<th>Residing and nesting organisms such as reptiles can be disturbed, injured or killed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>Direct</td>
<td>Restricted movement to sensitive areas and protected species and routes only</td>
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<tr>
<td></td>
<td></td>
<td>- Establish movement to sensitive areas and protected species and routes only</td>
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<td></td>
<td></td>
<td>- Identify rare, endangered</td>
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<tr>
<td></td>
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<td>- Use existing tracks and routes only</td>
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<tr>
<td></td>
<td></td>
<td>- Restrict movements to areas</td>
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<tr>
<td></td>
<td></td>
<td>- Disband/assist in wildlife</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Terrestrial ecology and biodiversity</th>
<th>Residing and nesting organisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>When species and amenity introduced to the area</td>
<td>Partly-reversible</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of magnitude of sensitivity</th>
<th>Significance of impact</th>
<th>Impact management/control measures</th>
<th>Residual mitigation measures</th>
<th>Description of impact</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Low (1)</td>
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<th>Recover</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Low (2)</td>
<td></td>
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<th>Recover</th>
<th>vegetation with natural disturbance of terrestrial ecology and biodiversity</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Low (4)</td>
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<tr>
<td>Low (1)</td>
<td>Description of Activity</td>
<td>Receptor</td>
<td>Description of Impact</td>
<td>Magnitude of Change</td>
<td>Size of Impact</td>
<td>Value of Sensitivity</td>
<td>Description of Magnitude of Change</td>
<td>Description of Impact</td>
</tr>
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</tr>
<tr>
<td>Extensive vegetation clearing</td>
<td>Soil</td>
<td>Moderate</td>
<td>Loss of soil quality due to mixing of earth matter</td>
<td>Short term</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Low (2)</td>
<td>Drilling and the use of drilling and drilling equipment</td>
<td>Soil</td>
<td>Loss of soil quality due to mixing of earth matter</td>
<td>Moderate</td>
<td>Minor</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Activity</th>
<th>Impact</th>
<th>Description of Activity</th>
<th>Receptor</th>
<th>Sensitivity</th>
<th>Magnitude of Change</th>
<th>Significant Impact</th>
<th>Residual Impact Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling activities, movement of machinery and vehicles</td>
<td>High (6)</td>
<td>In the event of spills and soil not occurring and contaminating</td>
<td>Heritage</td>
<td>Moderate</td>
<td>Po-possible On-site Permanent Damage</td>
<td>High</td>
<td>Implement a chance find procedure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cultural heritage sites</td>
<td></td>
<td></td>
<td></td>
<td>Raise awareness about possible heritage finds</td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td>Report all finds that could be of heritage importance</td>
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<td></td>
<td></td>
<td>If needed, further investigation has to be done</td>
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<td></td>
<td></td>
<td>- Inform ECC and GPs</td>
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<td></td>
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<td></td>
<td></td>
<td>- Assess and cease activities at the site</td>
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<td></td>
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<td>- In case archaeological remains to be uncovered,</td>
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<td></td>
<td>- Raise awareness about possible heritage finds</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Implement a chance find procedure</td>
<td></td>
</tr>
</tbody>
</table>

- In the event of spills and soil not occurring and contaminating, Heritage sites, polluted soils must be collected and disposed of at an approved site. Leaks, polluted soils must be prevented and not allow mixing of mineral waste with topsoil.
<table>
<thead>
<tr>
<th>Magnitude</th>
<th>Activity</th>
<th>Description</th>
<th>Impact</th>
<th>Residual Mitigation Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor (4)</td>
<td>Drilling activities resulting into dust emissions</td>
<td>Drilling activities, resulting into dust emissions</td>
<td>Minor (6) Moderate</td>
<td>- Position drill equipment in such a way that it is out of sight from human receptors and receptors from other projects, if possible. - Apply dust suppression measures, if required, and recover and dispose of dust generated. - Archaeologists, if any, to be notified of the archaeological site to be followed. - Obtain appropriate clearance or approvals from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.</td>
</tr>
</tbody>
</table>
### DESCRIPTOR OF ACTIVITY

- Specific activities that may affect exposed/cleared land during exploration/exposed/cleared land during exploration.

### RECEPTOR

- Residents

### DESCRIPTION OF IMPACT

- Activities that may affect residents or livestock localities that may affect residents or livestock localities.
- Barriers or fences shall be erected between equipment to avoid dust.
- All vehicles and machinery/equipment shall be kept turned off when possible during high wind events.
- Residents needs to be informed at least two weeks in advance that drilling operations are within 1 km of their property.
- Maintain good housekeeping.
- Regular and frequent engagement with residents to identify any concerns or issues and appropriate mitigation and management measures agreed upon to help identify any concerns or risks.
- Regular and frequent engagement with residents.
- Housekeeping.
- Maintain good of their property operations are within 1 km in advance that drilling occurred at least two weeks before residents need to be resided on livestock/livestock localities that may affect residents or livestock localities.
- Barriers or fences shall be erected between equipment to avoid dust during high wind events.
- Specific activities that may affect exposed/cleared land during exploration/exposed/cleared land during exploration.

<table>
<thead>
<tr>
<th>Residual Impact</th>
<th>Mitigation Measures</th>
<th>Impact Management/Control</th>
<th>Significant Change of Impact</th>
<th>Sensitivity</th>
<th>Magnitude of Impact</th>
<th>Description of Impact</th>
<th>President</th>
<th>Activity of Description of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential occurrences of veld fires due to uncontrolled fire setups either by the exploration team camping on site</td>
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<tr>
<td>Infrastructure, Topography and Landscape</td>
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<tr>
<td>Possible damage and loss of property due to uncontrolled fire setups and indirect impact of fire outbreaks</td>
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<tr>
<td>Averse</td>
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<td>Low</td>
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<td>Low (2)</td>
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</tr>
<tr>
<td>No open fires are allowed to be lit by personnel associated with the Proponent anywhere on the EPL outside of dedicated campsites;</td>
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<tr>
<td>- The Proponent to ensure that exploration campsites have proper cooking facilities available to use. Gas stoves are the preferred option.</td>
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<tr>
<td>- No cigarette butts are allowed to be discarded into the environment. These should be contained in proper domestic bins and disposed of via the local landfill.</td>
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<tr>
<td>- No unauthorised movement beyond the exploration areas and campsites is allowed; and</td>
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<tr>
<td>- Proper fire hazard identification signage to be placed in areas that store flammable material (i.e. hydrocarbons and gas bottles).</td>
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</tbody>
</table>

<p>| Potential occurrences of veld fires during high wind periods from open fires, inadequate disposal of cigarette butts, and possibly mixing of flammable material together |
| Terrestrial ecology and bio-diversity |
| Possible damage to terrestrial biodiversity and loss of habitat due to uncontrolled fire outbreaks |
| Averse |
| Low |
| Low (2) |
| No open fires are allowed to be lit by personnel associated with the Proponent anywhere on the EPL outside of dedicated campsites; |
| - The Proponent to ensure that exploration campsites have proper cooking facilities available to use. Gas stoves are the preferred option. |
| - No cigarette butts are allowed to be discarded into the environment. These should be contained in proper domestic bins and disposed of via the local landfill. |
| - No unauthorised movement beyond the exploration areas and campsites is allowed; and |
| - Proper fire hazard identification signage to be placed in areas that store flammable material (i.e. hydrocarbons and gas bottles). |</p>
<table>
<thead>
<tr>
<th>Description of Activity</th>
<th>Receiver</th>
<th>Impact</th>
<th>Mitigation and Measures</th>
<th>Impact Management/Control</th>
<th>Description of Magnitude</th>
<th>Value of Sensitivity</th>
<th>Description of Impact</th>
<th>Description of Magnitude</th>
<th>Value of Sensitivity</th>
<th>Description of Impact</th>
<th>Description of Magnitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration activities, increased movement of machinery and vehicles</td>
<td>Community</td>
<td>Medium</td>
<td>Minor (4)</td>
<td>- Handled cross and diligently, others should be property owners.</td>
<td>- Infrastructure and Resources (i.e. erosion, etc.)</td>
<td>- Reversible</td>
<td>Moderate</td>
<td>- Deterioration of roads due to frequent movement of machinery and vehicles on site.</td>
<td>- Minor (6)</td>
<td>- Mineral development and mining activities (due to on-site resource extraction).</td>
<td>- Adverse</td>
</tr>
<tr>
<td>Infrastructure and Resources Constraint on resources (i.e. water) due to ongoing exploration activities</td>
<td>Community</td>
<td>Medium</td>
<td>Minor (4)</td>
<td>- Handled cross and diligently, others should be property owners.</td>
<td>- Infrastructure and Resources (i.e. erosion, etc.)</td>
<td>- Reversible</td>
<td>Moderate</td>
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<td>- Mineral development and mining activities (due to on-site resource extraction).</td>
<td>- Adverse</td>
</tr>
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<td>Movement of vehicles, exploration activities</td>
<td>Community</td>
<td>Medium</td>
<td>Minor (4)</td>
<td>- Handled cross and diligently, others should be property owners.</td>
<td>- Infrastructure and Resources (i.e. erosion, etc.)</td>
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<td>Receiver</td>
<td>Description of Impact Management/Control</td>
<td>Impacts</td>
<td>Mitigation</td>
<td>Acceptability of Impact</td>
<td>Mitigation of Residual Impact</td>
<td></td>
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<tr>
<td>Movement of vehicles</td>
<td>Community</td>
<td>Procedures to work on operation manual or development plan and implement an impact management plan to mitigate any concerns of residents and community, with regular engagement and feedback from residents and community.</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
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</tr>
<tr>
<td>Presence of exploration team</td>
<td>Community</td>
<td>Develop and implement an operation manual or development plan and implement an impact management plan to mitigate any concerns of residents and community, with regular engagement and feedback from residents and community.</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
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</tr>
<tr>
<td>Adverse</td>
<td>Community</td>
<td>Procedures to work on operation manual or development plan and implement an impact management plan to mitigate any concerns of residents and community, with regular engagement and feedback from residents and community.</td>
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<td>Low</td>
<td>Low</td>
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</tr>
<tr>
<td>Cumulative</td>
<td>Community</td>
<td>Procedures to work on operation manual or development plan and implement an impact management plan to mitigate any concerns of residents and community, with regular engagement and feedback from residents and community.</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
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<tr>
<td>Reversible</td>
<td>Community</td>
<td>Procedures to work on operation manual or development plan and implement an impact management plan to mitigate any concerns of residents and community, with regular engagement and feedback from residents and community.</td>
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</tbody>
</table>

- Farmers should have access to all farm areas at all times.
- Residents shall be provided at least two weeks’ notice of drilling operations within 1 km of their property.
- Existing water points and feeding areas need to be reflected in the plans and management of exploring operations within 1 km of their property.
- Residents shall be provided with at least two weeks’ notice of drilling operations within 1 km of their property.
- Damage to any farm tracks will be fixed by the Proponent.
- Farmers should have access to all farm areas at all times.
- Use existing roads for access, avoid new track/cut lines.
- Compliance with all applicable laws and regulations.
- Frequent and regular engagement with all community members, residents and farmers.
-开发和实施运营手册或操作程序在运营期间与社区和当地居民进行定期沟通和反馈，以缓解任何担忧。
- 动物移动、农田损失等。
- 居民至少应提前两周通知其1公里范围内的钻探作业。
- 存在的水源点和喂食区域需要在计划和管理中得到反映。
- 居民和农民应获得至少两周的通知，以通知其1公里范围内的钻探作业。
<table>
<thead>
<tr>
<th>DESCRIPTION OF ACTIVITY</th>
<th>RECEPTOR</th>
<th>DESCRIPTION OF IMPACT</th>
<th>EFFECT/MAGNITUDE</th>
<th>SENSITIVITY</th>
<th>IMPACT MANAGEMENT/CONTROL</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration activities</td>
<td>Community</td>
<td>Minor</td>
<td>Temporary</td>
<td>Local</td>
<td>Unlikely</td>
<td>Stock theft and</td>
</tr>
<tr>
<td>Exploration activities</td>
<td>Community</td>
<td>Minor</td>
<td>Temporary</td>
<td>Local</td>
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<td>Minor</td>
<td>Temporary</td>
<td>Local</td>
<td>Unlikely</td>
<td>Stock theft and</td>
</tr>
<tr>
<td>Exploration activities</td>
<td>Community</td>
<td>Minor</td>
<td>Temporary</td>
<td>Local</td>
<td>Unlikely</td>
<td>Stock theft and</td>
</tr>
<tr>
<td>Exploration activities</td>
<td>Community</td>
<td>Minor</td>
<td>Temporary</td>
<td>Local</td>
<td>Unlikely</td>
<td>Stock theft and</td>
</tr>
<tr>
<td>Exploration activities</td>
<td>Community</td>
<td>Minor</td>
<td>Temporary</td>
<td>Local</td>
<td>Unlikely</td>
<td>Stock theft and</td>
</tr>
</tbody>
</table>

**Description:**
- Stock theft and poaching: Minor, Temporary, Local, Unlikely. Possible local economy opportunity for development and creation of jobs. 
- Description of local economy opportunities: Possible local economy opportunity for development and creation of jobs.

**Recommendations:**
- Maintain frequent and regular engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon.
- Ensure appropriate supervision of all activities.
- Raise awareness (through interactive training sessions) and sensitize employees about contentious issues such as stock theft and poaching.
- Accidents and incidents need to be reported to Project Manager and recorded in incident register.
- Regular engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon.
- Enhance development of local skills where possible.
- Maximize local employment as far as possible.
- As far as possible, promote local procurement.
- Enhance intercultural training sessions.
- Raise awareness (through interactive training sessions) and sensitization of all activities.
- Accidents and incidents need to be reported to Project Manager and recorded in incident register.
- Regular engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon.
- Enhance development of local skills where possible.
- Maximize local employment as far as possible.
- As far as possible, promote local procurement.
- Enhance intercultural training sessions.
- Raise awareness (through interactive training sessions) and sensitization of all activities.
- Accidents and incidents need to be reported to Project Manager and recorded in incident register.
<table>
<thead>
<tr>
<th>Description of Activity</th>
<th>Receiver</th>
<th>Description of Magnitude of Impact</th>
<th>Value of Sensitivity</th>
<th>Description of Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict over jobs, hiring practices to avoid indue and transparent.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop and use fair, consistent, and transparent hiring practices to avoid conflict over jobs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Votorantim Metals (Pty) Ltd
EPL 8127 Environmental Scoping Report Plus Impact Assessment
7.1.1 FURTHER CONSIDERATION: NOISE AND VISUAL IMPACTS AND POTENTIAL CONFLICT WITH LANDOWNERS

Exploration and mining activities have the potential to disrupt the sense of place, a collective term to describe the special and uniqueness of an area, mostly through the amplifying effects of noise, dust, machinery movements, and visual intrusion. Collectively, the activities have a negative impact on the naturalness of the landscape with the result to temporarily alter and affect the lifestyles of receptors (neighbours, farm owners, tourists). Such disturbances brought about by exploration activities are often-short term and reversible. For the duration of the proposed Project, engagement with the affected parties and key stakeholders is critical and shall be maintained. In the event where the drill site is located in proximity to the receptors, measures will be taken to reduce the visual impacts.

Through the identification and evaluation of impacts the conclusion of the assessment is that with mitigation included in the EMP, the significance of effect is expected to be minor. No additional studies are considered necessary to further assess this impact.

Table 10 - Summary of effects

<table>
<thead>
<tr>
<th>Activity</th>
<th>Receptor</th>
<th>Impact</th>
<th>Nature of impact</th>
<th>Value &amp; sensitivity</th>
<th>Magnitude of change</th>
<th>Significance of impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placement and operations of heavy machinery and drill rigs, equipment and the creation of laydown areas on site</td>
<td>Neighbours / land owners / tourists</td>
<td>Visual impacts (obscure views, create visual contrast, dust, intrusive objects), movement of heavy machinery, nuisance (noise), loss of naturalness</td>
<td>Adverse Direct Reversible Local / on-site Short term Certain</td>
<td>Medium</td>
<td>Minor</td>
<td>Minor Adverse</td>
</tr>
<tr>
<td>Movement of vehicles, exploration activities and increased movement of the exploration team in the area</td>
<td>Neighbours / land owners</td>
<td>Create conflict with farm owners and neighbours about access, leaving gates open, suspicious movements, loss of farming area, etc.</td>
<td>Adverse Indirect Reversible Minor Temporary On-site Likely</td>
<td>Medium</td>
<td>Moderate</td>
<td>Moderate Adverse</td>
</tr>
</tbody>
</table>
The following additional mitigation measures have been identified in addition to those presented in the EMP and shall be communicated to the Proponent to ensure environmental effects are minimised as reasonably practicable:

- Landowners and neighbors should be engaged prior to the commencement of the exploration activities and land access agreements should be negotiated and agreed upon
- Reasonable time frames for duty will be put in place i.e. no drilling when it is dark
- Site notice of Project will be available at the site during the course of the proposed Project
- Adequate procedures for drilling activities will be encouraged i.e. no hammering of drill rods with steel hammers
- Drill equipment shall be suitably positioned to ensure that noisy equipment is as far away from human receptors as possible
- Noise suppression measures shall be applied by all drilling staff (e.g. earmuffs are mandatory) and if drilling occurs in locations that may affect residents
- Residents shall be provided at least two weeks’ notice of drilling operations within 1km of their property, and
- The Proponent shall undertake frequent and regular continual engagement with residents.

The potential impact therefore is not considered significant as it does not exceed widely recognised levels of acceptable change; does not threaten the integrity of the receptors, nor is it material to the decision-making.
8 ENVIRONMENTAL MANAGEMENT PLAN

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

The management measures should be adhered to during all stages of the exploration activities. All persons involved and partaking in the proposed activities should be made aware of the measures outlined in the EMP to ensure activities are conducted in an environmentally responsible manner. An induction should be used to familiarize all involved prior to starting their activity, supported with daily toolbox safety and environment talks, and checked with daily inspections by a competent person.

The objectives of the EMP are:

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

ECC’s EIA methodology was used to undertake the environmental assessment for the proposed Project to identify if there is potential for significant effects to occur as a result of the proposed Project. Through the scoping process, the identified risks were the potential visual impacts and noise levels to increase thereby impacting human receptors in the area, additionally, conflict with landowners was assessed to be likely and of moderate significance, however these impacts can be managed and mitigated through frequent and prior notices and communications. All other social and environmental receptors which were scoped as significant effects, were unlikely and therefore no further assessment was deemed necessary. Through this scoping study and identification of mitigation and management methods, the assessment concludes that the likely significance of effects on humans from noise impacts is expected to be minor and prior awareness and communication about the Project shall be conducted. Various best practice and mitigation measures have been identified to avoid and reduce effects as far as reasonably practicable, as well as ensure the environment is protected and unforeseen effects and environmental disturbances are avoided.
REFERENCES


APPENDIX A - EMP
ENVIRONMENTAL MANAGEMENT PLAN

EXPLORATION ACTIVITIES ON EPL 8127
FOR BASE AND RARE METALS, INDUSTRIAL MINERALS AND PRECIOUS METALS,
OTJOZONDJUPA REGION

PREPARED FOR VOTORANTIM METALS NAMIBIA (PTY) LTD

March 2022
TITLE AND APPROVAL PAGE

Project Name: Environmental Management Plan for exploration activities on EPL 8127 for base and rare Metals, industrial minerals, and precious metals, in the Otjozondjupa Region.

Project Number: ECC-88-351-REP-07-D

Client Name: Votorantim Metals Namibia (Pty) Ltd

Ministry Reference: APP-002822

Status of Report: Final for Government Submission

Date of issue: March 2022

Review Period: N/A

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Please note at ECC we care about lessening our footprint on the environment; therefore all documents are printed double sided.
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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
MEFT Ministry of Environment, Forestry and Tourism
1 INTRODUCTION

1.1 BACKGROUND TO THE PROPOSED PROJECT

Environmental Compliance Consultancy (ECC) has been engaged by the proponent (Votorantim Metals Namibia (Pty) Ltd) to undertake an Environmental and Social Impact Assessment (ESIA) and develop an Environmental Management Plan (EMP) in compliance with and as required by the Environmental Management Act, No. 7 of 2007 and its regulations. An application for an environmental clearance will be submitted to the relevant competent authorities, the Ministry of Mines and Energy (MME) and the Ministry of Environment, Forestry and Tourism (MEFT).

Votorantim is a large international group who undertakes mineral exploration activities in Namibia. The proposed low impact exploration activities will be undertaken on EPL 8127 for base and rare metals, industrial minerals, and precious metals. The proposed project area lies within the Otjozondjupa Region. The proposed project area can be accessed via the B8 road, east of Otavi and via the D2806 road southwest of Kombat (Figure 1).

FIGURE 1 - LOCATION OF EPL 8127
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, 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 to ensure potential environmental and social impacts are mitigated and minimised as far as practically possible and to ensure 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 is 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 / or updated when the scope of works alters, or when further data / 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, industrial minerals, precious metals and semi-precious stones on EPL 8127.

1.4 MANAGEMENT OF THIS EMP

The proponent, Votorantim Metals Namibia (Pty) Ltd, will hold the environmental clearance certificate for the proposed project and shall be responsible for the implementation and management of this EMP. Prior to the exploration activities, this EMP shall be reviewed, amended as required and approved for implementation. The implementation and management of this EMP and thus the monitoring of compliance shall be undertaken through daily duties and activities as well as 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 is based on the project description as provided in the environmental scoping 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 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. 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:

**Environmental Compliance Consultancy**
PO BOX 91193
Klein Windhoek, Namibia
Tel: +264 81 669 7608
Email: info@eccenvironmental.com
2 PROJECT MANAGEMENT PERSONNEL

The proponent shall provide a project team to oversee and undertake the preparation and exploration activities, which shall be composed of the proponent’s personnel and contractors. A single nominated role, as accountable person, shall be identified to ensure the management and implementation of this EMP throughout the duration of the project, which shall be supported by the proponent.

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 responsibilities are notified of their appointment and confirm 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

<table>
<thead>
<tr>
<th>ROLE</th>
<th>RESPONSIBILITIES &amp; DUTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proponent</td>
<td>- Overall responsibility for the implementation and management of this EMP;</td>
</tr>
<tr>
<td></td>
<td>- 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;</td>
</tr>
<tr>
<td></td>
<td>- Responsible for providing the required resources (including financial and technical) to complete the required tasks;</td>
</tr>
<tr>
<td></td>
<td>- Appoint supervisors such as an exploration (project) manager and a site manager;</td>
</tr>
<tr>
<td></td>
<td>- Ensure that all employees, contractors and visitors are inducted on environment measures as outline in the scoping and EMP reports and safety measures as compiled by the proponent.</td>
</tr>
<tr>
<td>Exploration Manager</td>
<td>- Responsible for ensuring compliance with this EMP including overseeing all day to day activities during the duration of the project, including routine and non-routine maintenance works, as well as the decommissioning of the project;</td>
</tr>
<tr>
<td></td>
<td>- Ensure adequate resources are made available for implementation of this EMP;</td>
</tr>
<tr>
<td></td>
<td>- Responsible for the management, maintenance and revisions of this EMP;</td>
</tr>
<tr>
<td></td>
<td>- Ensure all personnel are aware of, adhere to and enact the commitments made in this EMP and any other relevant regulatory requirements applicable to the project;</td>
</tr>
</tbody>
</table>

MARCH 2022
- Ensure all employees and contractors participate in a site induction process prior to commencing work on the project;
- Maintain the community issues and concern register, and keep records of complaints;
- Ensure that best environmental practice is undertaken throughout the duration of the project; and
- Report any non-compliance or accidents to the regulatory authority.

Site Manager (or nominated supervisor)
- 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;
- Provide environmental awareness / management training and site inductions for all employees, contractors and visitors;
- Monitor daily operations and ensure adherence by personnel to the EMP;
- Receive, respond to and record complaints; and
- Report any non-compliance or accidents to the explorations (project) manager.

Employees (and contractors and visitors where applicable)
- Responsible for being compliant with this EMP throughout the project;
- Adhere to this EMP at all times;
- Ensure attendance of site inductions;
- Ensure appropriate briefings for certain activities have been provided and are fully understood; and
- Report any operations and conditions that deviate from the EMP or any non-compliant issues or accidents to the site manager and exploration manager.
- Responsible for asking if in doubt
- Responsible for reporting exceptions and incidents immediately to their supervisor

### 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 immediately to the Exploration Manager; and
- Ensuring appropriate corrective or remedial action is taken to address all environmental hazards and incidents reported.
2.3 EMPLOYMENT

The proponent (and all contractors) shall comply with the requirements of the 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 establishment / maintenance and relevant contract employment positions;
- The number of job opportunities shall be made known together with the associated skills and qualifications and the hiring process described and communicated (transparent);
- 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.
3 COMMUNICATION AND TRAINING

In order to ensure 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 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 and or site manager shall communicate any 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.

During the exploration activities, communications between the management team shall include discussing any complaints received and actions to resolve them, incidents and responses, 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. These numbers will be posted on each drill site and available within each company vehicle.

<table>
<thead>
<tr>
<th>TOWN</th>
<th>AMBULANCE</th>
<th>POLICE</th>
<th>FIRE BRIGADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Otavi</td>
<td>+264 (67) 23-4194</td>
<td>+264 (67) 23-4006</td>
<td>-</td>
</tr>
<tr>
<td>Kombat</td>
<td>+264 (67) 23-1000 / 1038</td>
<td>+264 (67) 231-086</td>
<td>+264 (67) 23-1000</td>
</tr>
<tr>
<td>Otjiwarongo</td>
<td>+264 (67) 30-3734</td>
<td>+264 (67) 1-0111</td>
<td>+264 (67) 30-4444</td>
</tr>
</tbody>
</table>

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 overall responsible for the 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. 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 as well as confirmation a documented response was provided.

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 a register of completed training is maintained.

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

- A general site-specific induction that outlines:
  - What is meant by “environment” and “social”
  - Why the environment needs to be protected and conserved
  - How exploration activities can impact on the environment
  - 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 should they occur;
- Basic vegetation clearing principles 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 responsible people 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 notified 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 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 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 accident, is immediately reported to the exploration manager.

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. A licence to abstract and use water may be required if boreholes are to be created, although this is unlikely. If required, the proponent will apply for relevant permits and shall operate in accordance with any conditions of the licence.

Some vegetation will be cleared on the EPL to allow exploration activities to commence. It is unlikely that an area greater than 15ha will be cleared, therefore a permit under the Forest Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005 and its regulations of 2015 is not required.

4.3 CHANCE FINDS PROCEDURES

In an unlikely event of high sensitivity and valuable heritage findings, the proposed project shall be in line with the procedures set out below to cover the reporting and management of such finds.

Scope: The “chance finds” procedure covers the actions to be taken from the discovery of a heritage site or item to its investigation and assessment by a trained archaeologist or other appropriately qualified person.

Compliance: The “chance finds” procedure is intended to ensure compliance with relevant
provisions of the National Heritage Act (27 of 2004), especially Section 55 (4): “a person who discovers any archaeological .... object ......must as soon as practicable report the discovery to the Council”.

The procedure of reporting set out below must be observed so that heritage remains reported to the NHC are correctly identified in the field:

<table>
<thead>
<tr>
<th>ROLE</th>
<th>RESPONSIBILITIES &amp; DUTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operators and contractors</td>
<td>To exercise due caution and stop work if archaeological remains are found. Notify Supervisor immediately.</td>
</tr>
<tr>
<td>Site manager</td>
<td>To secure site and advise management in a timely manner (immediately)</td>
</tr>
<tr>
<td>Proponent and Exploration managers</td>
<td>To determine safe working boundary and request inspection</td>
</tr>
<tr>
<td>Archaeologist</td>
<td>To inspect, identify, advise management, and recover remains</td>
</tr>
</tbody>
</table>

4.3.1 PROCEDURES

Action by person identifying archaeological or heritage material:

- If operating machinery or equipment stop work
- Identify the site with flag tape
- Determine GPS position if possible
- Report findings to foreman

Action by site manager:

- Report findings, site location and actions taken proponent and exploration managers
- Cease any works in immediate vicinity

Action by proponent and exploration managers:

- Visit site and determine whether work can proceed without damage to findings
- Determine and mark exclusion boundary
- Site location and details to be added to project GIS for field confirmation by archaeologist

Action by archaeologist:

- Inspect site and confirm addition to project GIS
- Advise NHC and request written permission to remove findings from work area
- Recovery, packaging and labelling of findings for transfer to National Museum

In the event of discovering human remains, procedures are to be carried out as per the above. Moreover, a field inspection by archaeologist is to be conducted to confirm that remains are human, following a liaise with NHC and Police. Thereafter, the recovery of remains and removal to National Museum or National Forensic Laboratory, should be conducted as directed.
4.4 NON-COMPLIANCE

4.4.1 NON-COMPLIANCE EVENT

Where exceptions with this EMP are identified, the exploration manager shall employ corrective actions so that the works return to being compliant as soon as possible. For incidents such as spills, workers on site are required to respond immediately to stop the spill from getting worse, if safe to do so. Assuming two workers or more are on site, then one can report immediately and the other stops the spill, if safe to do so. Spill cleanup equipment can be used immediately, if safe to do so. 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 / situation, for example, is considered if:

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

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

4.5 INCIDENT REPORTING

The exploration manager must ensure that an accident and incident (including minor or 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.

4.5.1 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 / 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 / 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 roles responsible. This register will be subject to regular review by the exploration manager and updated when necessary.

The exploration manager and or 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 has been completed to identify all the commitments and agreements made within the environmental scoping 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>
<thead>
<tr>
<th>Activity: Access and site preparation</th>
<th>Responsibility: Exploration manager (or site manager and exploration supervisor)</th>
<th>Potential Impacts: Potential damage to cultural heritage sites</th>
<th>Monitoring Requirements</th>
<th>Management / Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>- Limiting access to the farms, ensuring documented permission of who may enter the farms for exploration purposes is provided to the farmers. - No unauthorised movement on farms is allowed. - Farmers should always have access to all farm areas at all times. - Existing water points and feeding areas must remain unaffected. - Use existing roads for access to avoid new tracks. - Compliance with all applicable laws and agreements. - Exploration manager to visit the site and determine whether work can proceed without damage to uncovered cultural activities and the excavation area. - In case archaeological remains are of importance, the exploration manager has to assess and demarcate the area. - Report all finds that could be of heritage importance. Ensure awareness of possible heritage finds. - Implementation of the Chance Find Procedure.</td>
<td>-</td>
<td>-</td>
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</tr>
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<td>Potential Impacts: Limiting access to the farms, enforcing the significance of the protocols of the Chance Find Procedure, have to be followed. If needed, further investigation has to be requested. - If access and site preparation have to be disrupted, further investigation has to be requested. - Position with EEC appointed archaeologists with GPS. - Explorers mark exclusion boundaries and consult farmers. - Exploration manager to visit the site and determine whether work can proceed without damage to uncovered cultural activities and the excavation area. - In case archaeological remains are of importance, the exploration manager has to assess and demarcate the area. - Report all finds that could be of heritage importance. Ensure awareness of possible heritage finds. - Implementation of the Chance Find Procedure.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Activity: Exploration, Moorebank site</td>
<td>Responsibility: Exploration manager (or site manager and exploration supervisor)</td>
<td>Potential Impacts: Potential damage to cultural heritage sites</td>
<td>Monitoring Requirements</td>
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**TABLE 3 - ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES**
### General

- No disturbance or displacement of access routes (into the bush/ off-road driving)
- Training and awareness to sensitize employees and notify them on avoiding some areas
- Restrain movement to determine times
- Retrace movements to determine times
- Inform the police if the remains are human
- Obtain appropriate clearance or approval from the relevant authorities
- Remove the remains to the National Museum or National Forensic Laboratory
- Reunite the remains to their owners, if feasible and notify and inform the police if the remains are human
- Retrieve the remains and relocate or leave premises (depending on the nature and value of the remains)
- Inform the police if the remains are human
- Remove the remains to the National Museum or National Forensic Laboratory

### Exploration activities

- During exploration activities movement of vehicles and equipment can be disturbed, injured or killed by proximity to proposed project area
- Residing and nesting of organisms in proximity can be disturbed, injured or killed by movement of vehicles and equipment during exploration activities

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>Exploration activities during exploration activities movement of vehicles and equipment can be disturbed, injured or killed by proximity to proposed project area</td>
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<tr>
<td>Monthly</td>
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</tr>
<tr>
<td>Frequency</td>
<td>Activity Description</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Weekly</td>
<td>Identify, contact, and mitigate measures with L&amp;APs to apply dust suppression where possible. In advance that drilling operations are within 7km of their property, residents need to be informed at least two weeks in advance. Should residents or livestock be affected, barriers or fences shall be used at drilling occurs in proximity to proposed project area. Position drill equipment in such a way that it is out of sight from human receptors.</td>
</tr>
<tr>
<td>Daily</td>
<td>drone: Respect civic aviation regulations about the use of a drone and between periods of use. All equipment to be shut down or removed back property notice of drilling operations within 1km of their property. Residents shall be provided at least two weeks’ notice of drilling operations. Ensure that noisy equipment is away from drill equipment itself. No activities between 7am until 7pm on Saturdays. Restrict excessive noise to areas of activities only.</td>
</tr>
</tbody>
</table>
|           | Residents and nesting organisms: Avoid disturbance to rocky outcrop areas and bird roosting or nesting areas. Ensure no animals or birds may be collected, captured, or removed from site. Avoid disturbance to rocky outcrop areas and tracks where all vehicles and machinery equipment to be shut down or removed back property. All vehicles and machinery equipment to be shut down or removed back property. | Dust and emissions: Loss of sense of place | Visual disturbances: 

Conflict with farmers and neighbours about ambient noise

- Equipment and vehicles and ambient noise from operations and proximity to the proposed project area can be disturbed as a result of emissions.

- Residents and nesting organisms in bird roosting or nesting areas.
<table>
<thead>
<tr>
<th>Weekly</th>
<th>Only property functioning chemical toilets shall be used. Where possible, water from existing water sources shall be used with a pre-treatment system. Where possible, wastewater shall be collected and treated. Drilling system should be due during any accidental spill. Consider alternative sites when the water table is too high. Ensure drill pads and spill kits are in place.</th>
<th>Groundwater contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>Topsoil should be collected and disposed of on a approved site. In the event of spills and leaks, polluted soil must be treated and ameliorated to avoid contamination. Spill kit should be used to absorb and prevent spillage. Dunnage and drill rig should be covered to prevent contamination of soil. Limit the possibility of compaction and creating of a hard sub-surface.</td>
<td>Enhanced soil erosion</td>
</tr>
<tr>
<td>Weekly</td>
<td>Where necessary, install diversions to control possible erosion. Drilling system should be covered to prevent contamination from spills and leaks. Chemical toilets should be used at all times. Where possible, plan access routes, drill pads and camp sites outside of existing drainage lines.</td>
<td>Compaction and pollution, earth matter, wind-blown dust.</td>
</tr>
<tr>
<td>Vegetation clearance for access routes, drill pads and temporary contractor camps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of plant species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of habitat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create landscape scars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of Sense of Place</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Use existing roads for access to avoid new tracks and cut lines
- Minimise clearance areas through proper planning
- Avoid new tracks around disturbed and protected areas of the exploration activities
- Minimise clearing access roads through proper planning
- Use existing roads for access to avoid new tracks
- Identify trees, shrubs and patches of vegetation
- Keep new tracks around disturbed and protected areas of the exploration activities
- During toolbox talks and induction, highlight to workers so that the removal of significant plants can be avoided

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Alien plants and weeds can accidentally be introduced

- All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (or present on the project site) should have an internal weed and seed inspection completed prior to equipment being used
- Where possible rescue and relocate plants of significance

Vegetation clearance

- All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (or present on the project site) should have an internal weed and seed inspection completed prior to equipment being used
- Where possible rescue and relocate plants of significance

Fuel handling

- Water contamination
- Soil contamination
- Equipment on and storage, small pads and access routes, vegetation camps

Fuel handling

- Water contamination
- Soil contamination
- Equipment on and storage, small pads and access routes, vegetation camps
<table>
<thead>
<tr>
<th>Site Manager (or nominated site supervisor)</th>
<th>Site Supervisor</th>
<th>Employees, contractors, site manager</th>
<th>Weekly</th>
<th>Daily and site manager (or nominated site supervisor)</th>
</tr>
</thead>
</table>
| Implement a Standard Operating Procedure on waste management, from cradle to grave for all kinds of waste possible on-site (e.g. hydrocarbons, domestic, waste water) | Implement a culture of correct waste collection, complimentary to the waste hierarchy – avoid, re-use, recycle | Appropriate and functional toilets shall be ensured for the campsites | Spill kits and absorption material available during fuel delivery, storage or use | Preventative measures will be in place when in use (e.g. non-porous surfaces, non-damaged containers and maintenance activities are done)
| Spills to be reported to the exploration manager | Spills to be reported to the exploration manager | Spill kits and absorption material available during refuelling and de-fuelling in designated areas (with only fuels and lubricants) | Spill kits and absorption material available during refuelling and de-fuelling in designated areas (with only fuels and lubricants) | Plant and equipment to be well maintained and serviced (e.g. non-porous surfaces, non-damaged containers and maintenance activities are done)
| Oil and gas contamination | Ecological risks and impacts | Contain spillage and waste disposal | Contain spillage and waste disposal | Contain spillage and waste disposal |
| Soil contamination | Water contamination | Nuisance (visual impacts, potential litter from exploration activities and campsite) | Nuisance (visual impacts, potential litter from exploration activities and campsite) | Nuisance (visual impacts, potential litter from exploration activities and campsite) |
| Good housekeeping | Training and awareness through toolbox talks and induction | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) |
| Wastewater management | Waste management | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) |
| Water quality | Water quality | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) |
| Vegetation | Vegetation | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) | Site manager (or nominated site supervisor) |

**ECC DOCUMENT CONTROL - ECC-88-351-REP-07-D**

**VOTORANTIM METALS NAMIBIA (PTY) LTD**

**ENVIRONMENTAL MANAGEMENT PLAN**

**PAGE 24 OF 27**

**MARCH 2022**
Wastewater discharges will be contained – no disposal of waste water. All spills and water flow outfalls should be cleaned up with the landowners’ agreement. Ponds and lagoons are subject to use as resources (i.e., abstraction of water from property). Fishing is allowed with permits issued to the Exploration Manager. Water resources (i.e., water bodies) should be protected in areas that store renewable material or prevent the hazard of environmental damage to be avoided.

- Daily inspection of operations and site supervision.

- Exploration activities. Deterioration of roads due to on-going exploration activities. Run-off of rainwater due to erosion caused by continuous driving restrictions on roads (i.e., water) resources and infrastructure.

- No tracks or roads shall be created during the wet season. dirty tracks on farm roads and access tracks should be kept dry. All spills and water flow outfalls should be cleaned up with the landowners’ agreement.

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<th>Manager</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Roads shall be properly maintained i.e. excess loose material shall be removed and defects fixed.</td>
</tr>
<tr>
<td></td>
<td>Heritage disruption of heritage sites.</td>
</tr>
<tr>
<td></td>
<td>In case of discovering or unearthing heritage sites, the following measures (Chance Find Procedure) shall be applied:</td>
</tr>
<tr>
<td></td>
<td>In case of discovering of meaningful heritage sites, the material shall be removed and defects fixed.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>General manager (or nominated supervisor)</th>
<th>Daily Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>informative: if works cannot proceed without damage to environment, social manager, and the GPS positioning is possible, the manager is informed.</td>
</tr>
<tr>
<td></td>
<td>The site manager to visit the site and determine if works can proceed without damage to environment, social manager, and the GPS positioning.</td>
</tr>
<tr>
<td></td>
<td>Works to cease and the area to be demarcated with appropriate tape by the site supervisor, and the site manager to be informed.</td>
</tr>
<tr>
<td></td>
<td>Exploration manager or an archaeologist-specialist in archaeology who will provide advice.</td>
</tr>
<tr>
<td></td>
<td>In order to evaluate the significance of the remains and to determine the value and nature of the remains, inform the police of the remains if they are human.</td>
</tr>
<tr>
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<td>If works cannot proceed without damage to environment, social manager, and the GPS positioning is possible, the manager is informed.</td>
</tr>
</tbody>
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**Beneficial socio-economic impacts on a local and regional scale**

- Maximize local employment and local business opportunities.
- Enhance the use of local labor and local skills as far as reasonably possible.
- Sustain local economy and create jobs.

**Opportunities and business development skills**

- Job creation.
- Heritage.
- Disruption of heritage sites.
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 and 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 2021;
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.
APPENDIX B – BID
BACKGROUND INFORMATION DOCUMENT

EXPLORATION ACTIVITIES ON EPL 8127
FOR BASE AND RARE METALS, INDUSTRIAL MINERALS, AND PRECIOUS METALS:

PREPARED FOR

VOTORANTIM METALS NAMIBIA (PTY) LTD

JUNE 2021
1 PURPOSE OF THIS DOCUMENT
The purpose of this Background Information Document (BID) is to provide Interested and Affected Parties (I&APs) a background to the proposed project and to invite I&APs to register as part of the Environmental and Social Impact Assessment (ESIA) process.

The proposed project involves exploration activities for base and rare metals, precious metals on Exclusive Prospecting Licence (EPL) 8127, held by Votorantim Metals Namibia (Pty) Ltd.

Through registering for the project, all I&APs will be kept informed throughout the ESIA process, and a platform for participation will be provided to submit comments / recommendations pertaining to the project.

This BID includes the following information:
- The proposed project and location;
- The necessity of the project, potential benefits or adverse impacts anticipated;
- The alternatives to the project that have been considered and assessed;
- How the ESIA process works;
- The public participation process and how to become involved; and
- Next steps and the way forward.

2 DESCRIPTION OF PROPOSED PROJECT
2.1 BRIEF INTRODUCTION
Environmental Compliance Consultancy (ECC) has been engaged by the proponent (Votorantim Metals Namibia (Pty) Ltd) to undertake an ESIA and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, 2007 and its regulations. An environmental clearance application will be submitted to the relevant competent authorities, the Ministry of Mines and Energy (MME) and Ministry of Environment, Forestry and Tourism (MEFT).

2.2 LOCATION
Votorantim Metals proposes to explore in the Otjozondjupa Region in an area approximately 40km southeast of Otavi and 5km northeast of Kombat via the B8 road. The EPL can be accessed via the D2806 road. The location is shown in Figure 1.

2.3 WHAT IS PROPOSED
Votorantim Metals provides metal and mineral mining services worldwide. Votorantim Metals undertakes mineral exploration in Namibia and propose to undertake low impact exploration activities on EPL 8127.

2.4 WHY IS THE PROJECT NEEDED
Votorantim Metals intends to pursue exploration opportunities in Namibia with the aim of identifying new mining prospects. Namibia is rich with natural resources and the minerals sector is a key contributor to the nations GDP in Namibia. Exploration could lead to mining activities, which would...
contribute to the national and local economy.

2.5 **Operation Phase**
The proposed exploration activities are low-impact and non-intrusive. The following are envisaged during the proposed project:

- Soil sampling
- Regional geological mapping
- Limited vegetation clearing for the creation of tracks;
- Potential creation of cut-lines for geophysical surveys;
- Ground and airborne geophysical surveys;
- Opening access tracks in bush-encroached areas, where there are not sufficient existing tracks; and
- Drilling exploration boreholes.
2.6 POTENTIAL IMPACTS OF THE PROJECT

2.6.1 SOCIO-ECONOMIC
The potential social impacts are anticipated to be of low significance, and those that may transpire shall be confined within the EPL site, these potential impacts may include the following:

- Potential to unearth, damage or destroy undiscovered heritage remains;
- Minor disruption to the residents of the farms within the EPL, including some potential increase in noise levels and dust arising from drilling and vehicle use;
- Potential poaching/livestock theft impacts due to the increased movement of people in the area;
- Potential risk of uncontrolled fire occurrences, possibly from the exploration team camping on site;
- Some jobs will be created as a result of the project; and
- There will be economic benefits due to increased investment and investor confidence in the Namibian minerals sector.

2.6.2 ENVIRONMENTAL
The potential environmental impacts are anticipated to be of minor significance, and those that may occur shall be contained within the EPL site, these potential impacts may include the following:

- Some clearing of bush-encroached areas for access on foot and by car; the vegetation is expected to recover fully during ensuing rain seasons;
- Potential use of resources, including groundwater; and
- Minor risk of spillage of hydrocarbon, chemical or drill fluids from exploration activities may potentially lead to localised ground contamination; this aspect will be controlled at all times.

3 CONSIDERATION OF ALTERNATIVES

Best practice environmental assessment methodology calls for consideration and assessment of alternatives to a proposed project.

In a project such as this one, it is difficult to identify alternatives to satisfy the need of the proposed project; the activities shall be specific to the EPL 8127, which was granted by the MME on the 25th of March 2021.

During the assessment, alternatives will take the form of a consideration of optimisation and efficiency to reduce potential effects e.g. different types of technology or operations, route access and exploration methods.

4 THE ENVIRONMENTAL ASSESSMENT PROCESS

This ESIA, conducted by ECC, is undertaken in terms of the Environmental Management Act, 2007 and its regulations. The process followed in this ESIA is set out in the flowchart in Figure 2.
4.1 SCREENING
A review of the proposed project screening findings against the listed activities was conducted; the findings of which are summarised below.

FORESTRY ACTIVITIES
(4) The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in terms of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.

- Limited vegetation clearing may be required for tracks and survey access creation, and possibly for the set up for survey and drilling teams’ field camps.

WATER RESOURCE DEVELOPMENT
(8.1) The abstraction of ground or surface water for industrial or commercial purposes

- For the drilling of exploration boreholes, ground water may need to be abstracted, or water will be sourced.

MINING AND QUARRYING ACTIVITIES
(3.1) The construction of facilities for any process or activities which requires a licence, right or other form of authorisation, and the renewal of a licence, right or other form of authorisation, in terms of the Minerals (Prospecting and Mining Act), 1992

- The proposed project has obtained an EPL from MME; now requires an environmental clearance from DEA/MEFT for the search of base and rare metals, industrial minerals and precious metals.
• Minerals (e.g. soil and sand) will be sampled within selected target areas of the project area.

The potential environmental and social effects are anticipated to be of minor significance, and those that may occur shall be contained on the EPL 8127 site.

4.2 SCOPING
Due to the nature of the proposed project, and the implementation of industry best practice mitigation measures during the mineral exploration phase of the project, the effects on the environment and society are expected to be minimal and localised.

4.3 BASELINE STUDIES
For the proposed project, baseline information was obtained through a desk-based study and site verification processes through focusing on the environmental receptors that could be affected by the proposed project. ECC will also engage with stakeholders, I&APs and the proponents to seek input into the assessment.

4.4 IMPACT ASSESSMENT
Impacts will be assessed using the ECC ESIA methodology. The ESIA will be conducted in terms of the Environmental Management Act, 2007 and its regulations. ECC’s methodology for impact assessments was developed using IFC standards in particular Performance Standard 1 ‘Assessment and management of environmental and social risks and impacts’ (IFC 2012, 2017) and Namibian Draft Procedures and Guidance for ESIA and EMP (GRN, 2008) including international and national best practice with over 25 years of combined ESIA experience.

4.5 ENVIRONMENTAL MANAGEMENT PLAN
An EMP shall be developed for the proposed project setting out auditable management actions for Votorantim Metals Namibia (Pty) Ltd to ensure careful and sustainable management measures are implemented for their activities in respect of the surrounding environment and community.

4.6 PUBLIC PARTICIPATION AND ADVERTISING
Public participation is an important part of the ESIA process; it allows the public and other stakeholders to raise concerns or provide valuable local environmental knowledge that can benefit the assessment, in addition it can aid the design process. This project is currently at the scoping phase and public participation phase.

At this phase ECC will perform the following:
- Identify key stakeholders, authorities, municipalities, environmental groups and interested or affected members of the public, hereafter referred to as I&APs
- Distribute the BID for the proposed project (this document)
- Advertise the environmental application in two national newspapers
- Place notices on-site at or near the boundary
- If required host a public meeting to encourage stakeholder participation and engagement, and provide details of issues identified by the environmental practitioner, stakeholders and I&APs
- Record all comments of I&APs and present such comments, as well as responses provided by ECC, in the comments and responses report, which will be included in the scoping report that shall submitted with the application, and
- Circulate I&AP comments to the project team for consideration of project design.

Comments must be submitted in writing and can be emailed using the details in the contact us section below.

CONTACT US

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

Environmental Compliance Consultancy (ECC)

info@eccenvironmental.com

Tel: +264 816 697 608

www.eccenvironmental.com

At ECC we make sure all information is easily accessible to the public.

Follow us online to be kept up to date:
APPENDIX C - EVIDENCE OF PUBLIC CONSULTATION

The following was advertised in the ‘Republikein, Sun, and Allgemeine Zeitung’ newspapers on the 21st July 2021.
The following was advertised in the ‘Republikein, Sun, and Allgemeine Zeitung’ newspapers on the 21st July 2021.
SITE NOTICE

NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS
EXPLORATION ACTIVITIES ON EPL 8127
OTJONDUPA REGION, NAMIBIA

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

Applicant: Votorantim Metals Namibia (Pty) Ltd
Location: Otjondup Region, Namibia
Project ID: ECC-88-351

Proposed Project Activity: The proponent, Votorantim Metals Namibia (Pty) Ltd, propose to carry out exploration activities for base and rare metals, industrial minerals, and precious metals on EPL 8127 in the Otjondup Region, Namibia.

The site can be accessed via the B8 road southeast of Otavi. Exploration methods may include geochemical surveys (soil and rock sampling), geophysical surveys (electromagnetic surveys). Exploration sampling and drilling may occur at a later stage should initial test results appear viable.

EIA/PA Registration: The purpose of the review and registration period is to introduce the proposed project and to afford interested and Affected Parties (I&APs) an opportunity to register and comment on the Background Information Document (BID), to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

I&APs and stakeholders are required to register for the project at: www.ecenviro.com/projects

The team at ECC will then maintain contact with all registered I&APs to engage and to keep them informed as the ESIA process develops. ECC will also provide registered I&APs input opportunities and review periods throughout the assessment process.

Contact: Mr. MS Naidoo, Director
Environmental Compliance Consultancy
Registration Number CC/2013/03/55
PO Box 91333, Windhoek
Tel: 061 346 2030
E-mail: info@ecenviro.com
Website: www.ecenviro.com/projects
## REGISTERED MAIL AND STAKEHOLDER LIST

**Votorantim - ECC-88-351**

### List of Registered Items Posted

<table>
<thead>
<tr>
<th>Sender's reference no.</th>
<th>Addressee's name and address</th>
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No compensation will be considered unless enquiry regarding this postal article is made within one year after the date of posting.
Environmental Compliance Consultancy website:

www.eccenvironmental.com
Dear Mr. Bezuidenhout,

I refer to your letter of 5 July 2021, which was sent by registered post on 10 August and which we received yesterday, 3 September 2021, nearly 2 months later. From this it is obvious that other issues of concern have arisen since we last spoke to you on 4 September 2021.

I am happy that ECC values community input and participation as this can be of great value to your study.

Me and my neighbours have about 60 (sixty) years’ experience of exploration activities on our privately owned land. Over these years we have experienced the impact of exploration activities on our property owned through ownership and through hereditary rights.

Mr. Peter Zensi
Farm Hamburg
Via email & phone call
04.09.2021

Response from ECC 22.09.2021
FOR ATTENTION: MR. PETER ZENSI - FARM HAMBURG, 50409 2021
Dear Mr. Peter Zensi,

RE: PUBLIC CONSULTATION DURING THE ENVIRONMENTAL IMPACT ASSESSMENTS FOR VOTORANTIM METALS NAMIBIA PROPOSED EXPLORATION ACTIVITIES ON EPL 8127 IN THE OTJOZONDJUPA REGION, NAMIBIA.

ECC has been engaged by Votorantim Metals Namibia (Pty) Ltd to act on their behalf for the environmental impact assessments for their proposed exploration activities in the Otjozondjupa Region, Namibia. Following your correspondence sent via email on the 04th September 2021, ECC would like to acknowledge that we have received your comments and concerns regarding the proposed exploration activities near Kombat.

Please be informed that relevant comments and concerns received from stakeholders are recorded and acknowledged that we have received your comments and concerns regarding the proposed exploration activities near Kombat.

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Please be informed that relevant comments and concerns received from stakeholders are recorded and acknowledged that we have received your comments and concerns regarding the proposed exploration activities near Kombat.
some of your concerns and they have indicated to us that, in
particular, we have made the Proponent "Votorantim" well
aware of your concerns and they have indicated to us, that
ECC aspires to involve and engage with stakeholders in
efforts to address the feedback from the directly affected
farmers and communities.

We are aware of the concerns raised, and we have addressed them within the scoping and environmental
management plan reports, which will be provided to
interested parties and stakeholders.

As we are only 5 directly affected farmers, we suggest you engage directly with us: Invite us to Kombat Lodge Inn
or another suitable location in Lüderitz to conduct a
public consultation feedback session directly with us.

Regarding some of your concerns stated, we would like to
inform you that ECC has engaged with interested parties by advertising
in two national newspapers, placing the site notice in the
vicinity of the proposed Project area, sending postal
registered mail to farmers and providing the affected
farmer’s contact details. We have also provided an overview of the
environmental management plan reports, which will be addressed to
interested parties and stakeholders.
In this way you make sure to get valuable community input and participation into your Project and that it will be a meaningful EIA and not only a copy of one of the many you may have completed.

Thanking you,

Good Day!

We received your mail. Thank you!

We are waiting for your team to complete the contract. Please phone before you arrive on our premises so that the owner is on site.

Please note: We are on high alert because of stock theft. Please refer to Appendix A.

We hope that this letter satisfies your request for response.

Ms. Maltzahn,

6.08.2021

Dear Ms. Maltzahn,

We have acknowledged your concerns and will forward the message as such to the Proponent for their records. We have already previous communication and resolved the issues between yourselves.

Thank you for your email. We have acknowledged your concerns and will forward the message as such to the Proponent for their records.

Yours sincerely,

Votorantim Metals (Pty) Ltd

EPL 8127 Environmental Scoping Report Plus Impact Assessment

ECC Report No: ECC-68-351-REP-06-D

Votorantim Metals (Pty) Ltd

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<table>
<thead>
<tr>
<th>No.</th>
<th>Chapter</th>
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<tr>
<td>1</td>
<td></td>
<td></td>
<td>Votorantim Metals (Pty) Ltd</td>
<td>EPL 8127 Environmental Scoping Report Plus Impact Assessment</td>
</tr>
</tbody>
</table>
2. We must, first mention that a seven-day period to review over hundred pages of information is quite short, taking into consideration that we have full-time work that requires our attention from 07-18 daily. This letter also includes some of Peter Zensi's thoughts, because of the short notice and since he does not currently have access to his computer. We know that this is the period specified in the legal framework, but we would like to consider whether good practice would be at least two weeks notice. The letter also mentions some of the concerns are this related specifically to our site notice, which was held with Mr. Zensi by the Proponent during the latter part of November 2021. Furthermore, a face-to-face meeting was held with Mr. Zensi by the Proponent throughout the public consultation phase. 

2. Comments received based on the Draft Scoping Report and EMP provided to Registered Interested and Affected Parties (IRAPs):

<table>
<thead>
<tr>
<th>Stakeholder Comment</th>
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<tbody>
<tr>
<td>I&amp;AP Rev. 01, Page 101</td>
<td>J.P. von Maltzahn</td>
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<tr>
<td>Kind Regards.</td>
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<td>consent of the owner.</td>
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<td>without reporting and the</td>
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<td>It is illegal to enter our premises</td>
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Votorantim Metals (Pty) Ltd
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<th>Response / clarification</th>
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<tr>
<td>Mr. M Von Maltzahn via email Farm Segen 16 November 2021</td>
<td>Noted. Land access agreements will be entered into between the proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties. Before any work can commence, environmental mitigations must be in place. Furthermore, Mr. Zensi asked for a meeting in Kombat, and this meeting has not yet taken place. We are now more than 50% of the affected parties, and we demand a formal meeting in Kombat to discuss the reports and the specific sites of EPL 8127. To our knowledge, there have been no notices on the perimeter of the EPL 8127 informing the affected parties of the exact boundaries. We are now demanding written contracts before any exploration can be conducted on our farms. From previous experiences, we know that there will be considerable costs and expenses related to having the exploration teams on our farms. Furthermore, we have not yet been told what will be expected to handle the damages. We demand written contracts clearly stipulating the responsibilities, fines, actions, and environmental mitigations before any work can commence.</td>
</tr>
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Votorantim Metals (Pty) Ltd

EPL 8127 Environmental Scoping Report Plus Impact Assessment

ECC Report No: ECC-80-351-REP-06-D
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<td>Mr. M Von Maltzahn via email Farm Segen 16 November 2021</td>
<td>Roads: In the Scoping Report plus Impact Assessment there is mentioning of using mainly existing roads. This will need to be discussed and agreed on and specified in a contract. We rely on our farm roads for all our activities and we cannot afford to risk that heavy use of these roads will negatively affect our ability to conduct our agricultural activities. The conditions associated with the use of access roads by the exploration team will be negotiated and agreed to be between the Proponent and the landowner. See Table 9 for further recommendations to maintain road surfaces.</td>
</tr>
<tr>
<td></td>
<td>Water: We do not have water available for the exploration activities. We cannot afford to risk that heavy use of water will negatively affect our ability to conduct our agricultural activities. We rely on our farm boreholes for all our water needs. In the wet season we prohibit all exploration activities. The conditions associated with the use of water from the boreholes will be negotiated and agreed on and specified in a contract. The Proponent of the proposed Project is required to apply for an abstraction permit should they intend to drill a borehole on the farm. Alternatively, the Proponent may have agreements with the farmers or landowner to abstract water from the existing boreholes. In this case no permit applications are necessary.</td>
</tr>
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</table>
| | }
### ACCOMMODATION

We will not allow accommodation in the form of camps on the farms, and we expect all personnel to be off the farms in the hours between sunset and sunrise.

#### Mr. M Von Maltzahn via email

Farm Segen

16 November 2021

Noted. This aspect is encouraged to be included in the land access agreement with specific terms and conditions as agreed to between the Proponent and the applicable landowners before any exploration work.

### FARMING ACTIVITIES

No one of our farming activities should be affected by the exploration activities. This includes beef production based on a rotational grazing system and irrigation.

#### Mr. M Von Maltzahn via email

Farm Segen

16 November 2021

Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work. The land access agreement will contain all the terms and conditions agreed to by both parties before any exploration work commences on private property. The land access agreement will be entered into between the Proponent and the applicable landowners before any exploration work. The land access agreement will contain all the terms and conditions agreed to by both parties before any exploration work.

### We would like to stress the importance of a meeting here in Kombat for discussing the necessary contract stipulating the activities that are to be undertaken on the farm.

#### This exploration company has a really bad track record. Peter Zensi and other farmers have already been subjected to their bad practices, and although the Scoping Report plus Impact Assessment mentions mitigations to limit the negative effects of the exploration activities, we do not believe these measures will be effective.

#### Mr. M Von Maltzahn via email

Farm Segen

16 November 2021

Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties before any exploration work.

### FARMING ACTIVITIES

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### We will not allow accommodation on the farm.

#### Mr. M Von Maltzahn via email

Farm Segen

16 November 2021

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16 November 2021

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<tr>
<td>Peter Zensi</td>
<td>Farm Hamburg #504 21 Nov. 21</td>
</tr>
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</table>

**Soil Conservation**

- **Provision makes provision for the prevention and control of soil erosion.**
  - All I find in the EMP are diversions to control erosion. No mention of prevention. Please add measures to prevent erosion.

**Abstraction of ground water needs a permit and quantities must be reported.**

- **Who controls that this is done?**

**Access Roads point noted and added.**

- **This has been addressed both in the EIA chapter 7, Table 9 of the Report.**

**Water to site.**

- **Shall we water not be sufficient the Proponent may buy and transport if necessary.**

**Monitoring strategy**

- **The creation of access roads point noted and added.**

**Chapter 2.10 of the EIA Monitoring strategy**

- **The Proponent of the proposed Project is required to apply for an abstraction permit should they intend to drill a borehole for water abstraction.**

**Competent authorities for the proposed Project are MME and MEFT.**

- **Monitoring and audit procedures are done by the independent auditor as set up by the Proponent and when required by the competent authority.**

**Soil Conservation**

- **No mention of prevention, please add measures to prevent erosion.**

**Abstraction permit should they intend to drill a borehole for water abstraction.**

- **Who controls that this is done?**

**Access water needs a permit and quantities must be reported.**

- **Who controls that this is done?**

**Abstraction of ground water needs a permit and quantities must be reported.**

- **Who controls that this is done?**
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| Peter Zensi | Exploration activities may be classified in different phases. Exploration activities may be specific EPL for the validity period. Exploration activities may be pregnancy activities may be performed within the area. Exploration activities that are granted by the EPL license for 3 years and by the environmental clearance certificate for 3 years and therefore should not be blamed for stock theft due to their presence in the area. Please refer to the EPL chapter 7, Table 7 page 69 of 95 and the EMP Table 3. | **EPL 8127 Environmental Scoping Report Plus Impact Assessment**  
Votorantim Metals (Pty) Ltd  
ECC Report N  
no: ECC-88-351-REP-06-D  
MARCH 2022 REV 01 PAGE 106 OF 111 |
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Employment of people from Otavi:

Votorantim and their contractors must make sure to employ trustworthy people with good references from previous employers. These employees will become part of the farm's workforce and will live in the area, which means they are likely to come into contact with the local community. It is best practice for the Proponent of the Project to consider the employment of people from the local community.

Waste management:

Votorantim and their contractors must make sure to employ trustworthy people with good references from previous employers. These employees will become part of the farm's workforce and will live in the area, which means they are likely to come into contact with the local community. It is best practice for the Proponent of the Project to consider the employment of people from the local community.

**Transmission of Measles:** Measles is a highly contagious virus that lives in the nose and throat mucus of an infected person. It can spread to others through coughing and sneezing. Also, measles virus can live for up to two hours on survive on surfaces or in airspaces where the infected person was. If other people breathe the contaminated air or touch the infected surface, they can become infected. Measles is so contagious that if one person has it, 90% of the people close to that person who are not immune will also become infected. The best way to prevent this is to make sure that people are vaccinated.

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Increased movement of people, machinery and vehicles leads to disturbance of wildlife which leaves the area. This is of major concern to farmers who rely on hunting and sale of venison for an income. Mitigation: please add “as little movement as possible, at low speeds. If wildlife is encountered, stop and give it time to move off slowly.”

Peter Zensi
Farm Hamburg #504
21 Nov 21

This has been addressed both in the ESA chapter 7, Table 8 of the impact assessment and the EMP Table 3 page 20 of 27, Table 3, Creation of access roads point noted and added.

Deterioration of roads: drive as little as possible, not at all during wet conditions. Make provision for rehabilitation of damaged roads by the Proponent. They leave the problems to the farmers. High magnitude of change and high significance, not minimal

Peter Zensi
Farm Hamburg #504
21 Nov 21

This has been addressed both in the ESA chapter 7, Table 8 of the impact assessment and the EMP Table 3 page 20 of 27, Table 3. Creation of roads: drive as little as possible, not at all during wet conditions.

1.4 Management of the EMP. The monitoring of compliance shall be undertaken “as well as monthly inspections. Who does these inspections? I have witnessed none inspections. Who does these inspections...” This is major concern to the farmers. Table 1, page 8 of 27, EMP Table 3 page 20 of 27, Table 3, Creation of access roads.

Peter Zensi
Farm Hamburg #504
21 Nov 21

The Proponent of the proposed Project ensures monitoring are

Recommended monitoring periods and responsible personnel.

Chapter
Page 61 of 95

1.4 Management of the EMP. The monitoring of compliance shall be undertaken “as well as monthly inspections. Who does these inspections...” This is major concern to the farmers. Table 1, page 8 of 27, EMP Table 3 page 20 of 27, Table 3, Creation of access roads.

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<td>Peter Zensi</td>
<td>Stakeholder comments and issues.</td>
</tr>
</tbody>
</table>

**Chapter 2.3 Employment:**

- Please add points mentioned above.

**Chapter 5.2 Objectives:**

- Please add: No damage to farm infrastructure e.g., roads, water installations and fences.

**Groundwater:**

- Where possible, water from existing water sources should be used. Please change to: For drilling, Votorantim shall make provision for their own water sources.

**Executive Summary:**

- All site activities up to Votorantim’s standards. This is very vague. What standards do Votorantim uphold?

**Executive Summary:**

- The Proponent has to comply to the standards, laws, and policies outlined in Namibian laws such as the Environmental Management Act 1992 (No. 33 of 1992) and the Minerals (Prospecting and Mining) Act 1994 (No. 33 of 1994).

**Groundwater:**

- Where possible, water from existing water sources should be used.

**Groundwater:**

- Where possible, water from existing water sources should be used.

**Executive Summary:**

- The Proponent may only use water resources such as existing boreholes subject to agreements with the farm owner in our studies. It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to employ local residents of the proposed Project. The proposed Project has their own HR policies and selection procedures of employees.
The Proponent's response: Votorantim Metals is a Namibian subsidiary of Nexa Resources that is a global company, listed in the stock exchange of Toronto and New York. The main focus of the company is base metals, such as Lead, Zinc and Copper.

The exploration activities are part of the portfolio, and Votorantim aim to perform exploration in the ground to initially evaluate the mineral potential. The exploration reports and more information about Nexa can be seen in the link below.

Dear Lester and Laina,

I had a meeting last few days ago with Mr. Zensi about many issues, including the ECC for the EPL-8127.

He raised some points that he wants ECC to include in the document that are reasonable requests.

1- Wild-life – The EC document doesn’t mention anything about disturbance of wild life. EC should add to the main document a way to manage the work while wildlife is present. The farmer suggestion is to insert something like (should any wild animal is observed in the bush, cars and people must reduce their movement/speed to the minimum as possible not to scary the animals);
2- Chemical toilet must be present in the report as compulsory use concerning drilling activities while they are present in the farm;
3- The document says about use of existing sources of water, but this must be written in a way that this is possible only after farmers consent, in which a compensation must be applied should it happens. If no water is available, then the company has to find another solution.
4- Use of farm tracks: the company is responsible for fixing the tracks which were damaged by their use (including contractors).

These were his main concerns, which should be incorporated to the main text and not as an anexure.

Could you please revise the text and make those changes? After that, I suggest to resend another version to the affected farmers for evaluation.

Regarding a public meeting, I told the farmer that no application will be done until ECC makes the requested changes.

Eckhart/ Yvonne,
Please feel free to make comments or suggestions.

Regards,

In compliance with our obligations under the European Union General Data Protection Regulation, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, please be informed that our Privacy Policy can be found under the “Privacy” Section of our website https://www.nexaresources.com/privacy-policy. This Policy may be updated from time to time and we encourage you to review it periodically.


Este mensaje y sus anexos pueden contener información confidencial o privilegiada. Si usted no es el destinatario, por favor avise inmediatamente al remitente respondiendo este email y elimine el mensaje. Para los socios comerciales de Nexa Resources S.A.: en cumplimiento de sus obligaciones bajo el Reglamento General de Protección de Datos (UE) 2016/679, Nexa Resources S.A. solicita amablemente su atención a la Política de Privacidad, según se describe en la sección “Privacidad” en el sitio web https://www.nexaresources.com/privacy-policy. Esta política aplica a cualquier dato personal recibido / utilizado por la empresa Nexa Resources S.A. y podría estar sujeta a actualizaciones. Le recomendamos que lo revise periódicamente.
From: Mark von Maltzahn marki663@hotmail.com
Subject: Fwd: EPL 8127 - EMP and Scoping report
Date: 4 March 2022 at 4:10 PM
To: stephan@eccenvironmental.com, jessica@eccenvironmental.com
Cc: mariska@eccenvironmental.com, lester@eccenvironmental.com, info ecc info@eccenvironmental.com

Good day Mrs Bezuidenhout Mooney and Mr Bezuidenhout

We received the link to the updated reports for EPL 8127. This being the Environmental scoping report plus impact assessment and EMP(Environmental management plan). We are an I&AP registered for the proposed EPL.

We refer to the email and letter dated 16 Nov 2021.

1. Was this letter and email received? We do not see any reference to our concerns raised in the mentioned letter (PDF attached to email) in the updated documents.

2. Mr Zensi raised some concerns that were addressed in the your documents. We support and agree with these concerns, and some of the concerns were addressed in the updated documents following Mr Zensi concerns.

3. What is the procedure for rehabilitation and cleaning/clearing of the Proponent's activities? Which mitigating efforts will be applied to keep the natural surrounding intact and/or rehabilitate the natural surroundings?

4. We are concerned with the monitoring and policing of the exploration activities. Who is the responsible authority that we can contact or approach if Votoratim does not adhere to the guidelines and/or our requests and concerns?

 Regards

Mark Von Maltzahn
For Segen Farming

Begin forwarded message:

From: Mark von Maltzahn <marki663@hotmail.com>
Subject: EPL 8127 - EMP and Scoping report
Date: 16 November 2021 at 12:40:45 CAT
To: stephan@eccenvironmental.com, jessica@eccenvironmental.com

Good day Mrs Jessica Bezuidenhout Mooney & Mr Stefan Bezuidenhout

Please find attached letter in response to the Scoping report and impact assessment and environmental management plan for EPL 8127.

Please confirm receipt of this email and letter.

Regards

Mark Von Maltzahn

Reply ECC from Farm S...nsi.pdf
RE: Initial response on the information provided in the Environmental Management Plan and Environmental Scoping Report plus Impact Assessment

We must, first mention that a seven-day period to review over hundred pages of information is quite short, taking into consideration that we have an unreliable internet connection and that we have full-time work that requires our attention from 07-18 daily. This letter also includes some of Peter Zensi’s thoughts, because of the short notice and since he does not currently have access to his computer. We know that this is the period specified in the legal framework, but one could consider whether good practice would be at least two weeks’ notice.

We want to point out that this exploration company has been working in this area, and on Mr. Zensi’s farm and the company has over time developed a terrible reputation. Our scepticism and concerns are thus related specifically to the company that now demand access to our farms.

Furthermore, Mr. Zensi asked for a meeting in Kombat, and this meeting has not yet taken place. We are now more than 50 % of the affected parties, and we demand a formal meeting in Kombat to discuss the reports and the upcoming exploration. This includes more information on the specific sites of EPL 8127, and the details of the EPL 8127. To our knowledge there have been no notices on the perimeter of the EPL 8127 informing the affected parties of the exact boundaries.

We demand written contracts before any exploration can be conducted on the farms. From previous experiences, we know that there will be considerable costs and expenses related to having the exploration teams on our farms and that we will be expected to handle the damages and repairs related to their activities. A written contract clearly stipulating the responsibilities, fines, actions, and environmental mitigations must be in place before any work can commence.

We would like to underline and stress some of the details or topics that will need to be included in the mentioned contract:
Roads

In the Scoping Report plus Impact Assessment there is mentioning of using mainly existing roads. This will need to be discussed and agreed on and specified in a contract. From previous experiences, we know for a fact that the activities have caused huge disruptions and problems. We rely on our farm roads for all our farming activities, and we depend on them to be always drivable. We cannot afford to risk that heavy use of these fragile roads will negatively affect our ability to conduct our livelihoods. In the wet season we prohibit all exploration activities.

Water

The use of water from the boreholes on the farms will need to be discussed and agreed on and specified in a contract. Farm Segen does not have water available for the exploration activities and thus water must be supplied by the proponent and brought to site.

Accommodation

We will not allow accommodation in the form of camps on the farms, and we expect all personnel to be off the farms in the hours between sunset and sunrise.

Farming activities

No one of our farming activities should be affected by the exploration activities. This includes beef production based on a rotational grazing system and irrigation.

We would like to stress the importance of a meeting here in Kombat for discussing the necessary contract stipulating the activities that are to be undertaken on the farm.

This exploration company has a really bad track record. Peter Zensi and other farmers have already been subjected to their bad practices, and although the Scoping Report plus Impact Assessment mentions mitigations to limit the negative effects of the exploration activities, we know that these measures have not been taken.

There is no access to our farms until we have signed written contracts.

On behalf of Peter Zensi and Segen Farming

Kombat, 15 November 2021

______________________________
Mark von Maltzahn
NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND
PUBLIC PARTICIPATION PROCESS
EXPLORATION ACTIVITIES ON EPL 8127
OTJOZONDJUPA REGION, NAMIBIA

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

Applicant:
Environmental Assessment Practitioner (EAP):
Location:
Project Id:

Votorantim Metals Namibia (Pty) Ltd
Environmental Compliance Consultancy
Otjozondjupa Region, Namibia
ECC-88-351

Proposed Project Activity: The proponent, Votorantim Metals Namibia (Pty) Ltd, proposes to carry out exploration activities for base and rare metals, industrial minerals, and precious metals on EPL 8127 in the Otjozondjupa region, Namibia.

The site can be accessed via the BB road southeast of Otavi. Exploration methods may include geochemical surveys (soil and rock sampling), geophysical surveys (electromagnetic surveys). Exploration sampling and drilling may occur at a later stage should initial test results appear viable.

Location of EPL 8127: Otjozondjupa Region, Namibia

I&APs Registration: The purpose of the review and registration period is to introduce the proposed project and to afford Interested and Affected Parties (I&APs) an opportunity to register and comment on the Background Information Document (BID), to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

I&APs and stakeholders are required to register for the project at: www.eccenvironmental.com/projects

The team at ECC will then maintain contact with all registered I&APs to engage and to keep them informed as the ESIA process develops. ECC will also provide registered I&APs input opportunities and review periods throughout the assessment process.

ECC
ENVIRONMENTAL COMPLIANCE CONSULTANCY

Contact: Mr J Hoedemaker or Mrs J Mowrey
Environmental Compliance Consultancy
Registration Number CC/2013/13804
PO Box 51101, Windhoek
Tel: +264 81 666 7698
E-mail: info@eccenvironmental.com
Website: www.eccenvironmental.com/projects
Name of Consultant: Laina Wilhelm
Profession: Assistant Environmental Practitioner
Date of Birth: 26 January 1994
Nationality: Namibian
Membership in professional bodies: EAPAN
Email: laina@eccenvironmental.com
Website: www.eccenvironmental.com

QUALIFICATIONS:

Saint Petersburg Mining University, Russia: 2013 - 2019
Specialist Degree in Environmental Engineering in Mining
(NQF Level 8)

PROFILE:

Laina is ECC’s assistant environmentalist with an academic background in environmental engineering and mining. Laina aspires to contribute and express her knowledge and expertise in designing, planning and creating modern procedures and features aimed at controlling environmental impacts and hazards in Namibia.

KEY AREAS OF EXPERTISE:

| Environmental Management | - | Compiling compliance register  
| Tenement management  
| Environmental clearance applications |
| Environmental (and social) Impact Assessments (ESIAs) | - | Conducting and assisting in report writing for various small to large scale projects  
| Compiling EIA Reports and EMPs |
Administrations work - Submissions of applications to Competent Authorities. Quotation requests and delivery of office essentials. Preparing and submission of official letters Telephone and desk operating duties

LANGUAGES:

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Oshiwambo</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speak</td>
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<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Read</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Write</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

SUMMARY OF EXPERIENCE AND CAPABILITY:

Aug 2019 – Present: Environmental Compliance Consultancy
Position: Assistant Environmental Practitioner
- Submission of projects to competent authorities and management of application for ECC on Ministry of Environment and Tourism (EIA portal)
- Providing professional consulting services to clients
- Drafting EIA adverts and Non-Technical Summary (NTS) documents
- Assisting in the development of scoping reports
- Environmental management plans for exploration
- ESIA applications for various industries
References: Mr. Stephan Bezuidenhout & Mrs. Jessica Bezuidenhout
Money ☎️: +264 81 669 7608

Jun 2018 – Aug 2018: Okorusu Fluorspar Mine
Position: Assistant Environmental Officer
- Water Level and air quality monitoring
- Environmental data collection, entry and Interpretation
- Compilation and submission of bi-Annual environmental and environmental management plan reports
- Environmental risk assessment
References: Mr Philip Hooks
☎️: +264 61 30 5444

Jul 2017 – Aug 2017: QKR-Navachab Gold Mine
Position: Assistant Environmental Officer

- Investigating methods of treatment, remediation and/or disposal of hydrocarbon waste products
- Contamination mapping
- Air monitoring and water monitoring
- Sampling of tailings
- Compilation of environmental reports

References: Mrs Marietjie Bell
☎: +264 64 55 2083

PROJECT EXPERIENCE

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DATE</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skorpion Zinc (Namzinc) zinc sulphide and sulphuric acid transportation and storage facility ESIA applications</td>
<td>2021</td>
<td>Environmental Assessment Practitioner during EIA Process and project manager &amp; team member</td>
</tr>
<tr>
<td>Marenica Energy tenement management</td>
<td>2021</td>
<td>Environmental Assessment Practitioner during EIA Process and project assistant</td>
</tr>
<tr>
<td>ESIA applications for Votorantim Metals (Pty) Ltd various exploration activities</td>
<td>2019-2021</td>
<td>Environmental Assessment Practitioner during EIA Process and project manager</td>
</tr>
<tr>
<td>Jumbo Fair Trade Premium Committee - Traidcraft</td>
<td>2020-2021</td>
<td>Group advisor and project manager</td>
</tr>
<tr>
<td>Jumbo Group scheme external audits</td>
<td>2020</td>
<td>Assistant auditor and project team member</td>
</tr>
<tr>
<td>Compliance and legal register for Lepidico</td>
<td>2020</td>
<td>Environmental Assessment Practitioner and project team member</td>
</tr>
<tr>
<td>ESIA applications for Nuvella Namibia Lodges</td>
<td>2020</td>
<td>Environmental Assessment Practitioner during EIA Process and project manager</td>
</tr>
<tr>
<td>MEFT / GIZ Bush Control &amp; Biomass Utilisation (BCBU) training</td>
<td>2020</td>
<td>Team member</td>
</tr>
<tr>
<td>ESIA applications for Kuiseb Copper Company (Pty) Ltd various exploration activities</td>
<td>2020</td>
<td>Environmental Assessment Practitioner during EIA Process and project team member</td>
</tr>
<tr>
<td>ESIA applications for absolute tours Southern Cross Adventure Lodges</td>
<td>2019</td>
<td>Environmental Assessment Practitioner during EIA Process and project manager</td>
</tr>
</tbody>
</table>

CERTIFICATION:
I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and experience.

DATE: __11__/__02__/__2021__

_____________________
FULL NAME OF CONSULTANT: LAINA WILHELM
CURRICULUM VITAE
JESSICA BEZUIDENHOUT

Name of Consultant: Jessica Bezuidenhout
Position / Profession: Environmental Specialist
Date of Birth: 24 October 1984
Nationality: Australian – Namibian Domicile, mother of a Namibian child.
Email: jessica@eccenvironmental.com
Website: www.eccenvironmental.com
Contact: +264 81 653 1214

TERTIARY EDUCATION:


OTHER TRAINING:
- Management Systems Leadership
- ICAM – Incident Causes Analysis Method
- Certificate II in Metalliferous Mining Core Safety and Risk Management
- Certificate III in Mine Emergency Response & Rescue
- Level 3 – HLTFA402B Apply Advance First Aid Emergency Rope Rescue
- Level 2 – 21593VIC First Aid Level 2 Bonded Asbestos Removal > 10m²
- Leading and Managing People – Brisbane North Institute of TAFE

Professional Associations:
- Chamber of Mines Namibia
- Women on Boards
- The Chamber of Minerals and Energy of Western Australia Industry Member – Mining, Minerals and Resources
- Environmental Assessment Professional Association of Namibia (EAPAN)

PROFILE:
Jessica works as a Lead Environmental Practitioner with a diverse environmental background. Mrs Bezuidenhout has leading practical experience in fields of construction, exploration, monitoring and audit compliance, consultancy, operations, water treatment and wastewater treatment plants, environmental approvals, legal, minimising operational impacts, community liaison, including indigenous relationship management, mine closure and rehabilitation.
KEY AREAS OF EXPERTISE:

<table>
<thead>
<tr>
<th>Environmental Management</th>
<th>-</th>
<th>Project Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental (and social) Impact Assessments (EIAs)</td>
<td>-</td>
<td>Conducting and managing various small to large scale EIAs Compiling EIA Reports and EMPs Coordinate and review specialist studies</td>
</tr>
<tr>
<td>Environmental &amp; Social Compliance reporting</td>
<td>-</td>
<td>Environmental and Social compliance audits in the construction and mining industry</td>
</tr>
</tbody>
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LANGUAGES:

<table>
<thead>
<tr>
<th>English</th>
<th>Read</th>
<th>Write</th>
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</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

SUMMARY OF EXPERIENCE AND CAPABILITY:

Jessica has 15 years of mining and construction experience in the SHEQ field, with 7 years of that being in Australia and 8 years in Namibia and Southern Africa. Her first three years were as an Environmental Systems Coordinator where she obtained regulatory approvals, oversaw operational budgets and bond management for mine closures, oversaw compliance and ensured environmental and social aspects of international management codes were adhered to. The following 3 years she worked in the environmental management field as a Site Environmental Manager managing various projects and bringing sites into full compliance with environmental legislative frameworks, while also being responsible for the environment, sustainability, and social reporting portfolio. She then went on to work as an Environmental Consultant where she was responsible for mine closure and rehabilitation and sustainability reporting. Since 2016 Jessica has been a Managing Director of Environmental Compliance Consultancy (ECC) spearheading many environmental impact assessments undertaken in Southern Africa, advising clients and has thus gained great practical experience and knowledge on local and international compliance and auditing standards such as IFC and the World Bank.

PROJECT EXPERIENCE

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>DATE</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracted services by The Australian Defence Force (ADF) for Environmental Management of Defence projects.</td>
<td>2006 – 2007</td>
<td>Environmental Project Manager</td>
</tr>
<tr>
<td>Site environmental officer and systems coordinator, Ballarat Goldfields.</td>
<td>2007 – 2010</td>
<td>Environmental Systems Coordinator</td>
</tr>
<tr>
<td>Managed the environmental and community aspects of three operations: Savannah Nickel Mine, Copernicus Nickel Mine (currently in care and maintenance) and the operations at Wyndham Port</td>
<td>2010-2013</td>
<td>Site Environmental Manager</td>
</tr>
<tr>
<td>A mine closure project taking an operating mine site into the rehabilitation and closure phase. This project involved the full development of a mine closure plan, facilitation of the government</td>
<td>2013-2014</td>
<td>Environmental Consultant</td>
</tr>
</tbody>
</table>
approvals, stakeholder engagement and technical environmental studies to inform the mine closure plan

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Year</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full scale construction of new greenfield mine into an operational copper mine - Tschudi</td>
<td>2013-2016</td>
<td>HSE Manager</td>
</tr>
<tr>
<td>HSE management of operational underground mines, Otjihase and Matchless</td>
<td>2013-2016</td>
<td>HSE Manager</td>
</tr>
<tr>
<td>Director Environmental Compliance Consultancy</td>
<td>2016 – Current</td>
<td>Director and principle environmental practitioner</td>
</tr>
</tbody>
</table>

**Projects completed while at ECC**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Year</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Environmental Impact Assessment (EIA) for the proposed Walvis Bay Waterfront development</td>
<td>2018</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Conduct the Namibian assessment on the laws and policies relating to six thematic areas based on a compendium of best practices for governments to best deal with the full range of issues related to mining.</td>
<td>2018</td>
<td>Lead Environmental Assessment Practitioner</td>
</tr>
<tr>
<td>ESIA amendment for B2Gold Namibia Mining Licence (ML 169) to developed underground mine working for the Otjikoto Gold Mine</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Kunene Regional Counsel Sustainable water supply Pipeline and Ancillary works</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>ESIA application for B2Gold Namibia 10.8 megawatt PV solar upgrade to the B2Gold Power Plant</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>EIA application for sand removal on Farm Okakongo Nord No. 58</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>EIA application for Uris irrigation scheme</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>MAWF permit application for Water Abstraction and Discharge for Uris Irrigation scheme</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>EIA application for University of Namibia (UNAM) Katima Mulilo Campus Expansion</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>EIA application for B2Gold exploration activities EPL 6627 &amp; EPL 6628</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
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<tr>
<td>Project Description</td>
<td>Year</td>
<td>Responsibilities</td>
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<tr>
<td>ESIA application for farm Tsumore 761 Unit B Irrigation Project</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>MAWF permit application for Water Abstraction and Discharge for Tsumore 761 Unit B Irrigation Project</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>ESIA application for Otjiwarongo Wastewater Treatment and Bulk Water Supply</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>ESIA for the Wastewater Treatment facilities for Gondwanan Collection</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>MAWF permit application for Water Abstraction and Discharge for Gondwanan Collection</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Conduct an environmental assessment in order to complete an Environmental Impact Assessment and Environmental Management Plan (EMP) for Marenica Energy.</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Appointed Environmental Practitioner for the B2Gold exploration activities on EPL 6949. Conduct an environmental assessment in order to complete an Environmental Impact Assessment and Environmental Management Plan (EMP)</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
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<tr>
<td>Engaged by Marenica Energy to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) for EPL’s 6663, 7435, 7436, 7278 &amp; 7279 for Nuclear Fuel Minerals</td>
<td>2019</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Engaged by Marenica Energy to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) on EPL’s: 7703, 7340, 7303 &amp; 7172 for Base and Rare Metals, Industrial Minerals, Precious Metals and Semi-Precious Stones.</td>
<td>2020</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
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<td>Engaged by Mertens Mining and Trading (Pty) Ltd, to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) to undertake bulk sampling, exploration activities and trial processing on EPL 7699.</td>
<td>2020</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
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<tr>
<td>Engaged by Kuiseb Copper Company (Pty) (Ltd) to undertake an ESIA and an Environmental</td>
<td>2020</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process</td>
</tr>
<tr>
<td>Management Plan (EMP) for EPLs: 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731, 7732,</td>
<td>(including stakeholder engagement and PPP and report review)</td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td></td>
</tr>
<tr>
<td>Exploration by Cheetah Minerals</td>
<td>2020</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Engaged by Skorpion Zinc (Namzinc) (Pty) (Ltd) to undertake an ESIA and an Environmental Management Plan (EMP)</td>
<td>2021</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Engaged by Afritin Mining Namibia (Pty) Ltd to undertake the ESIA and Environmental Management Plan (EMP)</td>
<td>2021</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Project Wings - engaged by Headspring Investments (Pty) Ltd to undertake the Environmental, Social and Impact Assessment and Environmental Management Plan</td>
<td>2021</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Application for an Environmental Clearance Certificate for Twin Hills Gold Project</td>
<td>2021</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Engaged by Votorantim Metals Namibia (Pty) Ltd to undertake the ESIA and Environmental Management Plan (EMP) for exploration activities on EPL 8127</td>
<td>2021</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
<tr>
<td>Engaged by to undertake an ESIA and an Environmental Management Plan (EMP) for the stage 2 expansion of the pilot tin processing plant on Mining Licence (ML) 134, held by Uis Tin Mining Company</td>
<td>2021</td>
<td>Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)</td>
</tr>
</tbody>
</table>

CERTIFICATION:
I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and experience.

DATE: 10/11/20

FULL NAME OF CONSULTANT: JESSICA BEZUIDENHOUT