




ECC-88-338-REP-29-D

ENVIRONMENTAL SCOPING REPORT PLUS IMPACT ASSESSMENT

EXPLORATION ACTIVITIES ON EPL 7971 FOR BASE AND RARE METALS, INDUSTRIAL MINERALS, PRECIOUS METALS AND SEMI-PRECIOUS STONES IN THE KHOMAS REGION

PREPARED FOR VOTORANTIM METALS (PTY) LTD

JUNE 2021

ENVIRONMENTAL COMPLIANCE CONSULTANCY CC/2013/11404
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TITLE AND APPROVAL PAGE

Project Name:	Proposed exploration activities on EPL 7971 for base and rare metals, industrial minerals, precious metals and semi-precious stones in the Khomas Region.
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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) 7971 for base and rare metals, industrial minerals, precious metals and semi-precious stones in the Khomas Region.

The proposed project triggers listed activities in terms of the Environmental Management Act, No. 7 of 2007 and its Environmental Impact Assessment 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 scoping 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 7971 will likely include soil sampling, geophysical surveys (audio-magneto telluric, induced polarization and magnetic ground surveys), geological mapping, and exploration drilling. Some limited bush-clearing in bush encroached areas will be carried out, for the creation of working areas and access tracks where necessary. All sites of activity will be managed according to stringent environmental requirements that Votorantim upholds in its exploration projects. Access agreements will be entered into with all farmers / holders of private ground which may be accessed prior to any exploration work.

The exploration activities will commence as soon as an environmental clearance certificate has been granted by the Environmental Commissioner and activities are expected to be conducted over a 3-year period, which is the duration of the exploration licence. However, the period of each phase of the exploration programme may vary and will be refined as geological information becomes available.

EPL 7971 falls within the Nama-Karoo Biome with a vegetation type broadly classified as a western highlands structure constituting varied shrubland and grasslands. In some places plant growth become progressively shrubby, especially where the soils are shallower, slopes are steeper and where it is hillier and rockier (Mendelsohn et al, 2002). Thorny Acacia species dominate but a number of species are closely associated with the higher elevations only.

The impacts of exploration activities with respect 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. Additionally, there will be associated drilling and machinery noise, which could be a disturbance to immediate neighbours, 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.

Groundwater flow in the area takes place mainly along fractures and contact zones within hard rock formations. Groundwater in the area flows in a southeasterly direction as inferred from historical groundwater data. EPL 7971 is located entirely on the Kuiseb basin (Figure 10). The area has little to no groundwater potential (Mendelsohn et al., 2002) with a possible increased potential where fractures and faults occur on a local scale (Mendelsohn et al., 2002). The potential for contamination from the proposed activities is regarded as minimal. Protection of groundwater availability and quality is addressed in the EMP.

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

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

The overall potential impact of this proposed project is not considered significant as it does not widely exceed recognised levels of acceptable change, does not threaten the integrity of the receptors although a level of support to the community may be necessary in terms of water use, 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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DEFINITIONS AND ABBREVIATIONS

AMT	Audio-Magneto telluric
DEA	Directorate of Environmental Affairs
ECC	Environmental Compliance Consultancy
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPL	Exclusive Prospecting Licence
NDP5	Fifth National Development Plan
GDP	Gross Domestic Product
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
IP	Induced Polarization
I&AP	Interested and affected parties
IFC	International Finance Cooperation
MAWLR	Ministry of Agriculture, Water and Land Reform
MET	Ministry of Environment and Tourism
MEFT	Ministry of Environment, Forestry and Tourism
MHSS	Ministry of Health and Social Services
MME	Ministry of Mines and Energy
NSA	Namibian Statistics Agency
NTS	Non-Technical Summary
RAB	Rotary Air Blast (drilling)
RC	Reverse Circulation (drilling)
TB	Tuberculosis
WHO	World Health Organization

1 INTRODUCTION

1.1 PROJECT OVERVIEW

Votorantim Metals Namibia (Pty) Ltd intends to undertake mineral exploration activities on EPL 7971 for base and rare metals, industrial minerals and precious metals in Khomas Region (refer to Figure 1).

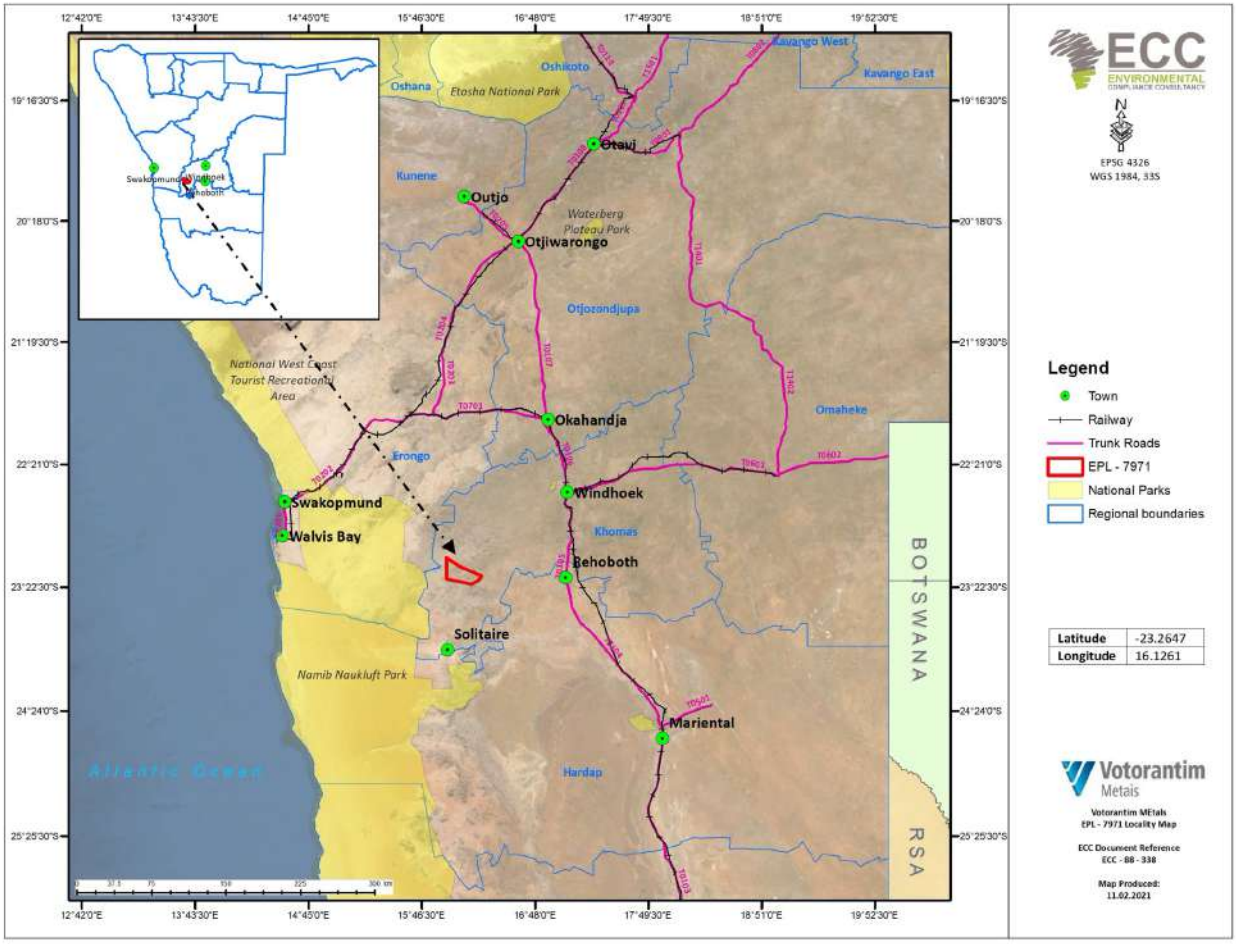


FIGURE 1 - LOCATION OF EPL 7971

Figure 2 provides more detail about the location of the EPL in relation to access routes. The proposed project area lies east of the Namib Naukluft Park boundary and cross the C26 road that run through the EPL. EPL 7971 is located approximately 30 km northeast of the Weissenfels guest farm and approximately 118 km northeast of Windhoek. The C26 road can be used to access the site (Figure 2). The C26 contains a section of road (mountain pass) that does not accommodate two-directional traffic lanes through the Gamsberg mountainous landscape toward the EPL, and therefore traffic movement challenges may be experienced at some point by road users.

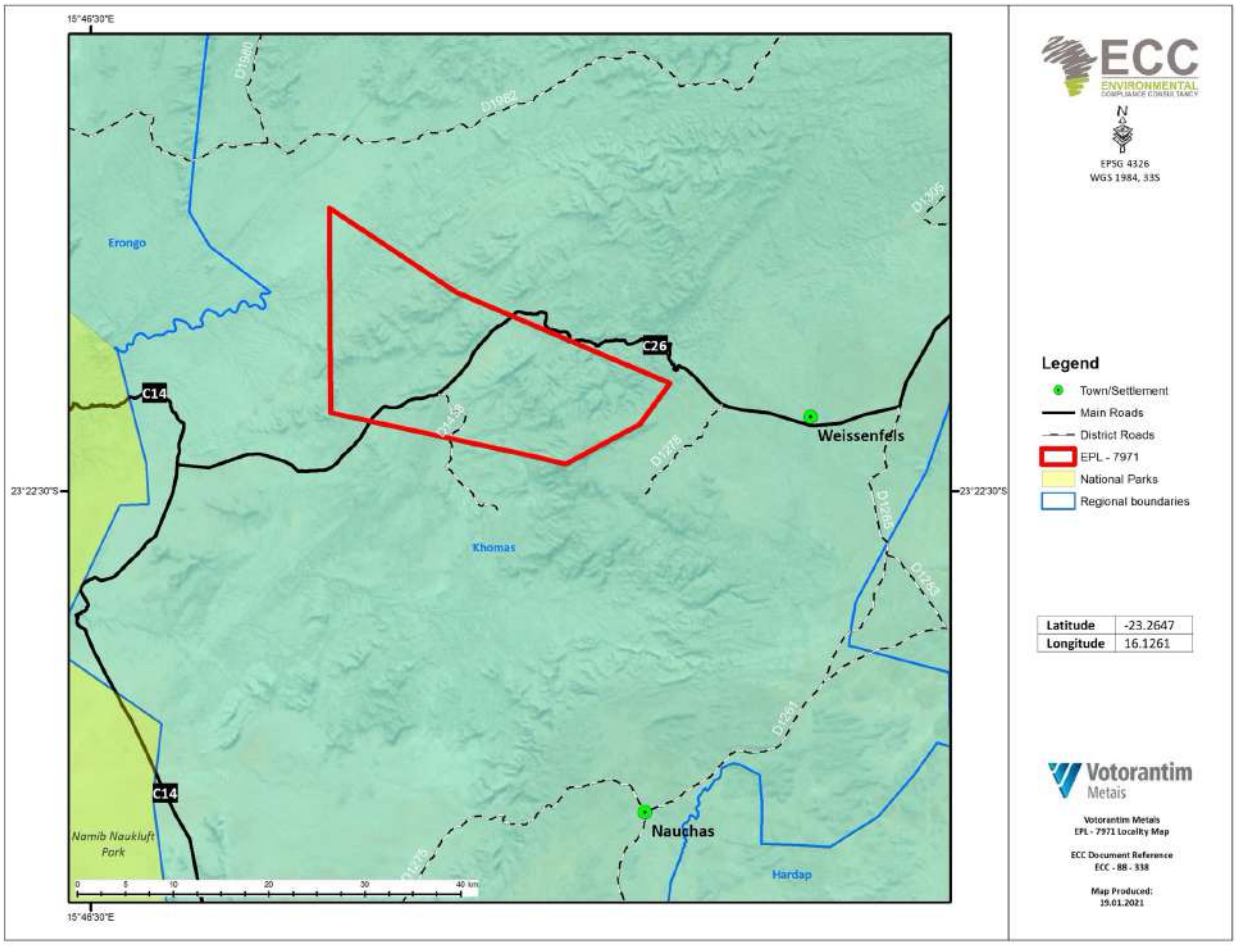


FIGURE 2 - LOCATION OF EPL 7971 IN RELATION TO ACCESS ROUTES

1.2 SCOPE OF WORK

Environmental Compliance Consultancy (ECC) has been engaged by the proponent, to undertake the ESIA and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, 2007 and its regulations.

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

An 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).

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

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

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

In addition to the environmental assessment, an EMP (Appendix A) is also required in terms of the Environmental Management Act, No. 7 of 2007. 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 The Proponent of the Proposed Project

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

TABLE 1 - PROPONENTS DETAILS

CONTACT	POSTAL ADDRESS	EMAIL ADDRESS	TELEPHONE
VOTORANTIM METALS NAMIBIA (PTY) LTD Mr Eckhart Freyer | Mrs. Yvonne Hass	P O Box 97957, Windhoek, Namibia	efreyer@iway.na	+264 81 124 7342

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:

Environmental Compliance Consultancy

PO BOX 91193
Klein Windhoek, Namibia
Tel: +264 81 669 7608
Email: info@eccenvironmental.com

1.5 Environmental Legal Requirements

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

TABLE 2 - LISTED ACTIVITY RELEVANT TO THE ESIA

LISTED ACTIVITY	SCREENING DETAILS RELEVANT TO THE PPOJECT
MINING AND QUARRYING ACTIVITIES (with relevance here only to exploration activities)	– The construction of facilities for any process or activities which requires a licence, right or other forms of authorisation, and the renewal of a licence, right or other forms of authorisation, in terms of the Minerals (Prospecting and Mining) Act, No. 33 of 1992. o The proposed project operates under a licence that permits the construction of temporal exploration campsites, drill sites and access roads. o Furthermore, this listed activity infers the provisions of the Act under a different licence category as a basis upon which certain activities qualify for an EIA. The Act defines prospecting and exploration activities under the lawful ownership of an EPL. An EPL excludes any mining activities, but includes activities strictly relating to exploration work. Hence the current project strictly focuses on exploration and not mining. – Other forms of mining or extraction of any natural resources whether regulated by law or not o Ground exploration activities may include soil and stream sediment geochemical sampling, geophysical surveys, geological mapping and drilling within EPL 7971. – Resource extraction, manipulation, conservation, and related activities o The proposed project will explore for base and rare metals, and precious metals.
WATER RESOURCE DEVELOPMENT	– The abstraction of ground or surface water for industrial or commercial purposes o Due to the exploration activities, groundwater will need to be abstracted, or sourced, particularly for the drilling phase. It is intended that water will be obtained from existing boreholes in the proposed project area, in liaison with landowners. Any additional borehole drilled for the intention of abstracting water for use on site should be permitted by the authorities in the form of an

LISTED ACTIVITY	SCREENING DETAILS RELEVANT TO THE PPOJECT
	abstraction permit.
FOREST ACTIVITIES	- 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 o 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.
HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE	- The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substance Ordinance, 1974. o The storage and handling of hydrocarbons (diesel fuel) on site may trigger pollution events if done incorrectly. - Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste. o Drilling activities will emit dust into the atmosphere.

1.6 TERMINOLOGIES APPLIED IN THIS REPORT

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

- **REMOTE SENSING** techniques in mineral exploration enable explorers to evaluate large areas of the earth remotely without having to undertake ground-based exploration operations. Remote sensing may be used to map the geology and structure that potentially localise the ore deposits, or may be used to identify rocks, which have been hydrothermally altered. Remote sensing involves the use of aircraft and satellite-based equipment to obtain the data to record spectral data from the surface of the earth. Remote sensing includes a number of tools and techniques including geographical information systems, radar and sonar. Typically, satellites or a high-flying aircraft are used in the data collection process. It is a useful tool when searching for minerals and can give an indication of where deposits could be located. Remote sensing aids in narrowing down the field survey area and help to identify target areas that may be considered for mapping.
- **GEOLOGICAL MAPPING** of outcrops is used to describe the primary lithology and morphology of rock bodies as well as age relationships between rock units. Mapping is a crucial part of refining subsurface targets, as it provides structural information and

can be used to predict the subsurface geology. This will be conducted concurrently with the geochemical sampling.

- **GEOCHEMICAL SAMPLING** (soil and rock sampling) is a non-invasive technique to determine the existence and extent of mineralization and a potential resource. Geochemical data are used to focus on areas of higher mineral potential as the project advances and help to define drill targets. They assist the company to drill more selectively and thereby increase the chances of intersecting mineralised zones during exploration and reduce the overall footprint of exploration and environmental impact in the area. Geochemical surveys will be the first ground exploration method to be undertaken by the proponent in the licence area.
- **SAMPLING** - Selecting a fractional but representative part of the soil or rock for analysis.
- **GROUND GEOPHYSICAL SURVEYS**, including magnetic and Induced Polarization (IP) techniques, will be undertaken, as appropriate, to collect data that give an indication of essential rock properties, particularly at depth. They are also used to map the geological structures. IP surveys involve sending electrical currents into the ground, measured via electrodes along linear cutlines up to 3 km long to provide access to electrical cables. Small holes in the ground (0.2m x 0.2m x 0.3m) will be required for IP electrodes every 25 or 50m along a survey line. Copper sulphate solution will be used to improve the conduction of electrodes during the IP survey. The majority of EM techniques are completely non-invasive and operate by sending electromagnetically induced currents into the ground. EM surveys are conducted along the same linear traverse lines. A variation is the Audio-Magneto Telluric (AMT) technique, in which surveys utilize the same lines and small holes in the ground, but without the application of high voltage electrical currents.
- **RAB DRILLING** (Rotary Air Blast drilling) is an open-hole technique that injects compressed air down the drill pipe and recovers the drill-chip fragments, on the outside of the drill stem.
- **DIAMOND DRILLING** entails the use of a diamond-studded drill in order to obtain core samples of two cm or more in diameter. Bio-degradable drill additives will be used during diamond core drilling. Soil, rock and drill core samples will be temporarily stored at the site office. Exploration activities are usually undertaken in phases, with periods of no field activity between them, whilst awaiting analytical results, and the integration and interpretation of data to decide on the next phase of exploration.

2 APPROACH TO THE IMPACT ASSESSMENT

2.1 PURPOSE AND SCOPE OF THE ASSESSMENT

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

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

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

2.2 THE ASSESSMENT PROCESS AND METHODOLOGY

The ESIA methodology applied here has been developed using the IFC standards and models (IFC, 2012; 2017), in particular Performance Standard 1: *'Assessment and management of environmental and social risks and impacts'* which establishes the importance of:

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

Furthermore, the Namibian Draft Procedures and Guidance for ESIA and EMP (GRN, 2008) as well as the international and national best practice documents to our disposal 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.

The process followed through the basic assessment is illustrated in Figure 3 and detailed further in the following sections.

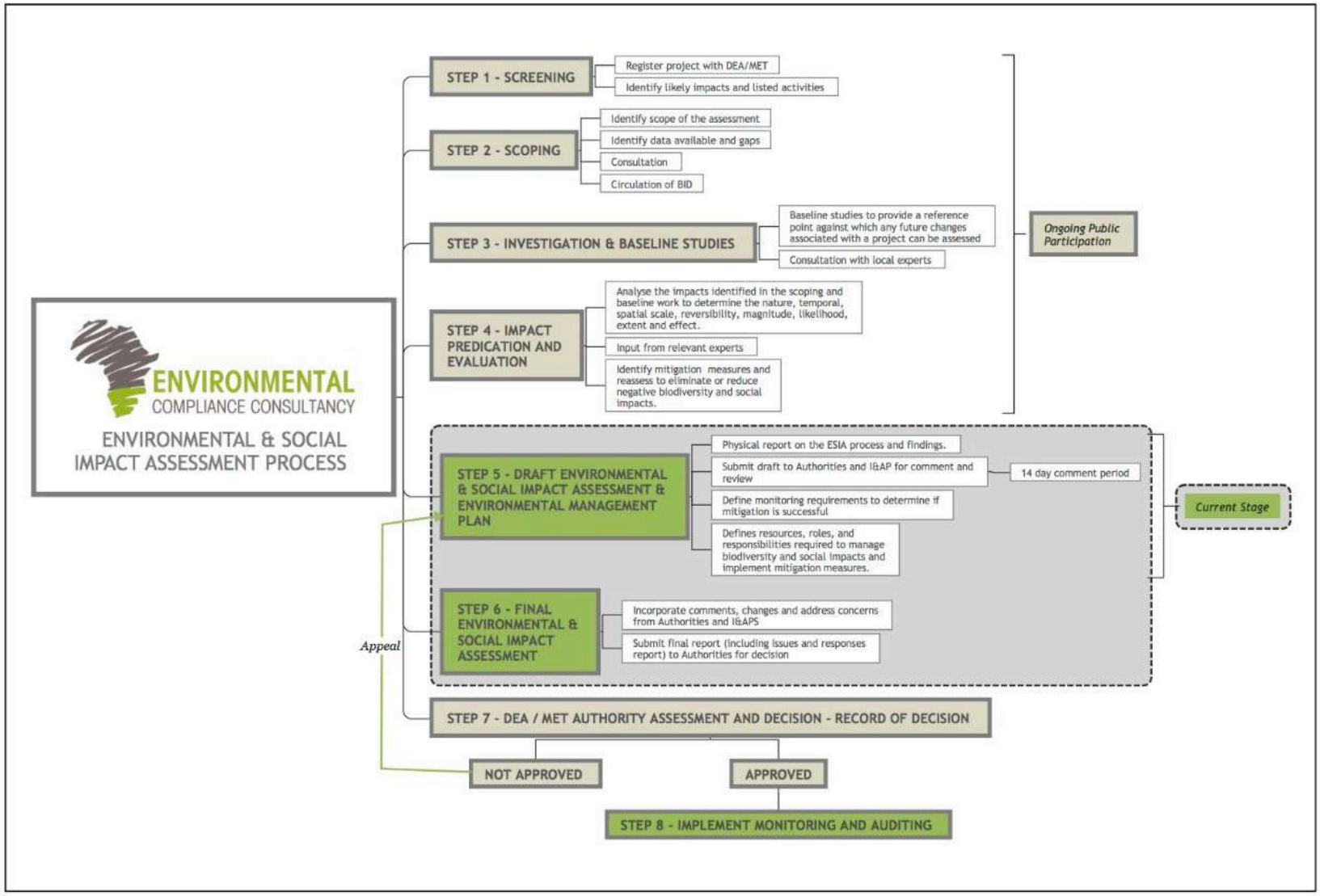


FIGURE 3 - ECC SCOPING PROCESS

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 may interact with the biophysical, social and economic environment. Impacts that are identified as potentially significant during the screening and scoping phases are taken forward for further assessment in the ESIA process. The details and outcome of the screening process are discussed further in sections 6 and 7.

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

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

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.
- Cultural heritage.

2.5 BASELINE STUDIES

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

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

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

The existing environment and social baseline for the proposed project were collected through various methods:

- Desk-top studies
- Consultation with stakeholders, and
- Engagement with Interested and Affected Parties (I&APs). See Appendix C.

2.6 IMPACT IDENTIFICIATION AND EVALUATION

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

2.7 ESIA CONSULTATION

Public participation and consultation are requirements in terms of Section 21 of the Environmental Management Act, No. 7 of 2007 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.

2.7.1 INTERESTED AND AFFECTED PARTIES

EPL 7971 overlaps with 19 farms (Figure 4). One district road, the C26 (Figure 2) run in a southwest direction through the EPL and provide access to the farms that overlap with and border the EPL. There is also an unmarked shorter road that branches off of the C26 in a westerly direction. All owners of the farms that overlap or border EPL 7971 were identified as I&APs, as well as the relevant authoritative bodies. Other I&APs were identified through invitations such as the newspaper advertisements and site notices.

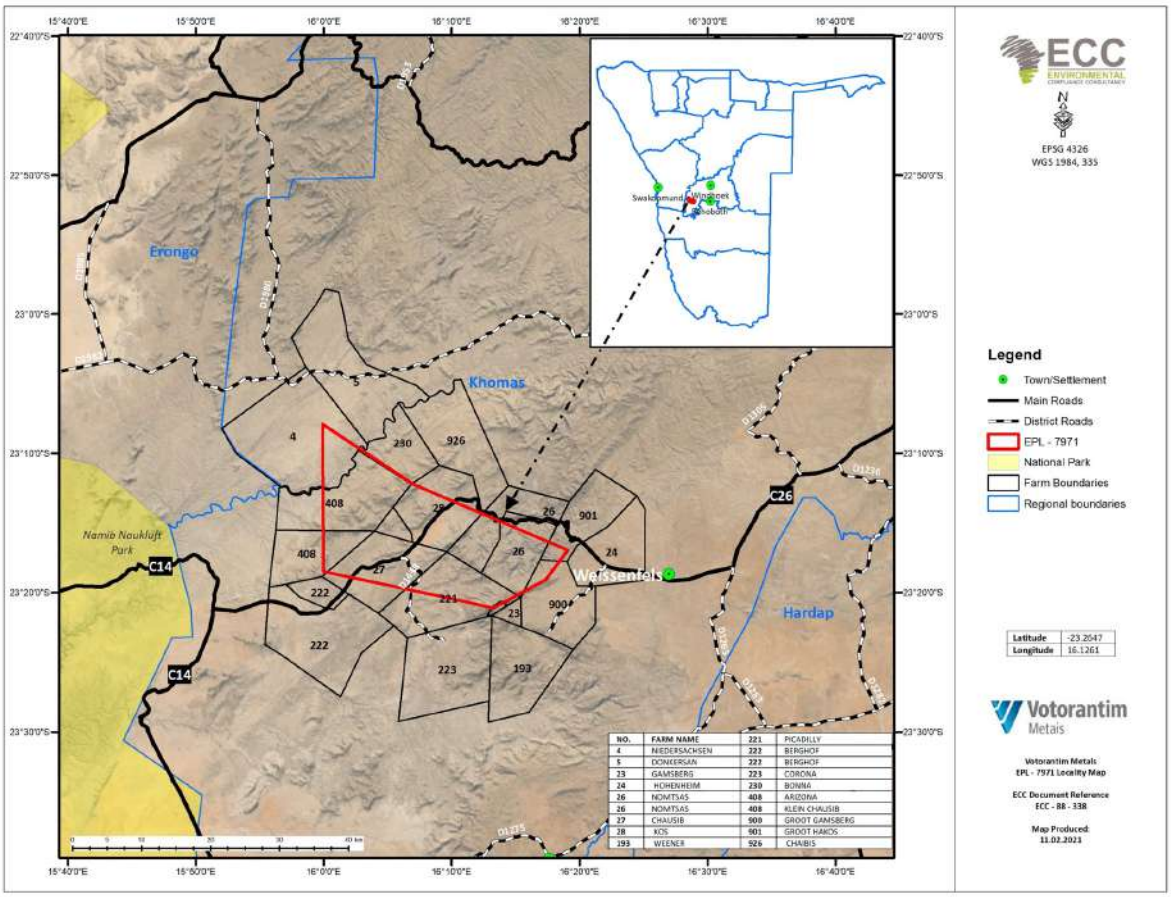


FIGURE 4 - LOCATION OF EPL 7971 RELATIVE TO NEIGHBOURING FARMS

2.7.2 NON-TECHNICAL SUMMARY

The Non-Technical Summary (NTS) presents a high-level description of the proposed project; sets out the EIA 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.

2.7.3 NEWSPAPER ADVERTISEMENTS

Notices regarding the proposed project and associated activities were circulated in three newspapers namely the 'Republikein, Sun, and Allgemeine Zeitung' on the 16th and 23rd February 2021 (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.

2.7.4 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.

2.7.5 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, no public meeting was held during the public consultation period, as it was not deemed necessary for this project. Moreover, the public has not raised any interests or requests for a meeting to be held.

2.7.6 CONSULTATION FEEDBACK

The I&APs were encouraged to provide constructive input during the consultation periods. Matters of concern raised during the initial round of consultation are presented in Appendix C. However, no issues or concerns were raised by the I&APs during the initial consultation period.

The public review period of the scoping report and the EMP will be set between 30 April – 11 May 2021 for a seven-day period, providing the public an opportunity, to provide ECC with any comments on the draft reports to be included and addressed, where applicable, in the final documentation. An extension was requested and granted until the 21st of May 2021. Additional comments were received after the 21st of May as well and recorded in this section. No additional comments were received.

TABLE 3 - SUMMARY OF COMMENTS RECEIVED AND RESPONSES ISSUED

I&AP / Stakeholder Comment received	Stakeholder details	Response / Clarification
Dear Lester, Please send all relevant documentation so that I can study it. When will your information meetings be held? Regards, Toni Hanke for the Gamsberg Plateau Portion 1 of the farm Picadilly 221.	Mr Toni Hanke Received on 12/06/2021 thanke@afol.com.na	Dear Mr. Hanke ECC acknowledges receipt of your email. Due to the large size of the documents prepared, kindly visit our website by following the link below to the reports (EPL 7971) you require. https://eccenvironmental.com/download/votorantim-metals-namibia-pty-ltd-proposed-exploration-activities-on-7-epls-across-namibia/ As there has not been any request for a public meeting thus far, ECC did not include it as part of the public consultation method adopted. Moreover, a public meeting is not a default legal requirement of the public consultation process as described in the EMA Regulations of 2012. Should you have any comments on the report, please provide the same to us by the 23rd of June 2021. No subsequent comments were received by the I&AP.
I own Farms Chaibis and Kos and I found the notice of an environmental assessment and public participation process for exploration activities on EPL 7971 tapped to my Motor grid gate on the 3rd of June 2021. I would please like some clarity on this as well as what	Mr. Riaan Bredenkamp Received on: 08/06/2021 botter@iway.na	Response from ECC on 08/06/2021 Dear Riaan, Thank you for your email. We acknowledge your request to have all correspondence in writing.

I&AP / Stakeholder Comment received	Stakeholder details	Response / Clarification
all it entails and what you guys want to be done? Due to previous experiences with things like this all correspondence must be done on email so that everything is in writing. I would like to be properly informed as the information I have received thus far is very vague. Regards Riaan		ECC was appointed by Votorantim Metals Namibia to undertake the environmental clearance certificate application process on their behalf for proposed exploration work. As part of the application process, we assess the potential environmental impacts associated with exploration programmes - which is what the client intends to do on EPL 7971, then formulate this into a scoping assessment report. It is important to note that no exploration work can commence without an approved environmental clearance certificate issued by the Ministry of Environment, Forestry and Tourism. We have communicated the EIA process as well as the drat scoping report and EMP through the Gamsberg Boere Vereniging (Farmer's Association) and asked them to distribute the documentation to their members between the 31st of April and the 11th of May 2021, in order to solicit any comments from the community for inclusion in the assessment report. Kindly follow the link below to access the draft assessment report and the environmental management plan developed for the proposed exploration work on EPL 7971. These reports will provide you with the project details, the legal requirements, the baseline conditions over the EPL, the

I&AP / Stakeholder Comment received	Stakeholder details	Response / Clarification
		potential impacts identified with their significance ratings assigned. https://eccenvironmental.com/download/votorantim-metals-namibia-pty-ltd-proposed-exploration-activities-on-7-epls-across-namibia/ Please do not hesitate to contact us, after reading the reports, should you have any further questions or want to raise any concerns you may have. ECC has received no further response form this I&AP.
I sent my comments to Stephan Bezuidenhout on 21/05/2021? I attach again. 1. To that I want to add that our public road (C26) cannot even handle the normal traffic as it is today. If any number of heavy vehicles will start using the road on a regular basis our vehicle repair costs will increase significantly and time needed to get to town and back will also increase significantly. We cannot accept that. 2. Weissenfels is a Guest Farm and not a settlement. I still didn't go through the whole document, but	Mrs Magda Schurz Received on 07/06/2021 schurz@afol.com.na	Response sent on 09/06/2021 Dear Mrs Schurz, Thank you for your email. We acknowledge receipt of your valuable comments and will include them where appropriate within our scoping assessment report. In addition, we have made the necessary corrections to the report as contained in the attached email you forwarded to us on the 21st of May 2021. The final report will be sent to all I&APs once finalised by our office. Responses per points raised are listed below:

I&AP / Stakeholder Comment received	Stakeholder details	Response / Clarification
these issues mentioned are very serious concerns to us and need to be addressed. I hope there will be some feedback. Kind regards Magda Schurz		1. Noted. This has been incorporated in section 5.2 of the report. 2. Weissenfels settlement was changed to Weissenfels Guest Farm. See sections 1.1 and 5.2 of the report.
With reference to your ESIA notification, we wish to inform you accordingly. 1. Farm Hakos consists of extreme mountainous terrain. There are no roads or tracks leading to the area mapped. 2. We have one semi-reliable borehole only from which we obtain our water and would therefore not be in a position to provide water for any prospectors/field workers. 3. Creating roads and boreholes would require extra-ordinary heavy duty equipment and techniques – 4x4 water drilling machines have extremely limited access on our farm, hence having only one active borehole. 4. Due to ongoing cattle/game theft, we do not permit anybody residing off the farmstead premise. We therefore wish to object to any prospecting activities on our farm and do not consider it a feasible	Received on 28/05/2021 Mrs Ursula Pond (Hakos Astrofarm) info@hakos-astrofarm.com	Response from ECC 31/05/2021 Dear Mrs Pond Thank you very much for making contact with us. We take note of your comments. We have added you to our stakeholder database, the purpose of which being that we could communicate with you about the environmental assessment as it progresses. In light of the above, please confirm whether you have received the draft scoping assessment report to review from the farmer's association? If not, please follow the link below to access the reports (Scoping report and EMP for EPL 7971). Please send us any additional comments you may have on the reports. https://eccenvironmental.com/download/votorantim-metals-namibia-pty-ltd-proposed-exploration-activities-on-7-epls-across-namibia/

I&AP / Stakeholder Comment received	Stakeholder details	Response / Clarification
undertaking.		We have opted to contact the farmers union to relay information through to the farmers, pertaining to the assessment, as we could not source the contact details of the individual farms that are overlapped by the EPL.
To whom it may concern We are a possible affected party, because our farm does not fall within the boundaries as indicated for the EPL7971. It is however very close and although I haven't been able to go through the whole document I have the following very serious concerns: 1. Your description of the site is confusing: Outjo and the Etosha National Park are very far away and serve as no useful reference points. The D2695, which you describe as an access road to the site, is not in this area. 2. It is advisable that you visit the site to familiarise yourselves with the accessibility to this site. 3. Water is a scarce and extremely precious commodity in our area. The continuous drought over many years have caused several bore holes to dry up. Borehole water is used with caution and precision only as is necessary for the livestock and persons residing on the	Received on 21/05/2021 Mrs Magda Schurz schurz@afol.com.na	Responses from ECC: 1. Location details were amended in the report. Kindly see section 1.1. We apologise for the location description error. 2. Noted. The site was visited by the proponent on 03/06/2021. 3. This observation is noted. Please refer to sections 4.3.4 and 5.6.2 where annotations of the present groundwater conditions were incorporated. 4. Noted. Please refer to section 4.3.3 describing the intended handling of this aspect. Specific mitigation measures are provided in the EMP to manage this aspect during exploration.

I&AP / Stakeholder Comment received	Stakeholder details	Response / Clarification
farm. There is no extra water. 4. The possible use of unemployed persons from the area let all red lights blaze: unemployed person are often involved in criminal activities and it is unacceptable to let such persons have access to farms where they can familiarise themselves with the activities and infrastructure. In the past we have had several incidences after e.g. Telecom and MTC brought in unemployed, unskilled workers. Stock theft and theft of solar pumps occurred during that time or shortly afterwards. Kind regards Magda Schurz		
To whom it may concern I was out of town for more than 2 weeks and only received your email today. It was impossible for me to study the documents and reply by the 11th. I need time till at least the 21st of May 2021, maybe more depending on the content of the documents and whether I need to consult experts. Kind Regards	Received on 18/05/2021 Mr Bernhard Schurz schurz@afol.com.na	Response from ECC on 18/05/2021 Dear Mr Schurz Thank you for your correspondence today. We take note of your request and hereby agree to your request for an extension of time to study the documentation and provide your comments back to us by the 21st of May 2021.

I&AP / Stakeholder Comment received	Stakeholder details	Response / Clarification
Bernhard Schurz		

2.8 DRAFT ESIA AND EMP

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

The ESIA report documents the findings of the assessment process, provides stakeholders with the opportunity to comment and continue consultation and forms part of the environmental clearance application. The EMP provides measures to manage the environmental and social impacts of the proposed project and outlines specific roles and responsibilities to fulfil the plan.

This ESIA report focuses on the significant impacts that may arise from the proposed project as described in Step 4 (Figure 3). These impacts are discussed in Chapter 6.

This ESIA report was open to stakeholders and I&APs for consultation for a period ending on the 11th of May 2021, satisfying the mandatory requirement of 7 days as set out in the Environmental Management Act, No. 7 of 2007 and its regulations, including the Environmental Impact Assessment Regulations, No. 30 of 2012. The period was further extended to the 21st of May 2021 as per an I&AP's request (Table 3). 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.

2.9 FINAL ESIA AND EMP

The final ESIA report and associated appendices will be available to all stakeholders on the ECC website www.eccenvironmental.com. All I&APs were informed via email. The ESIA report and appendices has been formally submitted to the Office of the Environmental Commissioner, DEA as part of the application for an environmental clearance certificate.

2.10 AUTHORITY ASSESSMENT AND DECISION MAKING

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

2.11 MONITORING AND AUDITING

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

3 REGULATORY FRAMEWORK

This chapter outlines the regulatory framework applicable to the proposed project. Table 2 provides a list of applicable legislation and the relevance to the project. An environmental clearance is required for any activity listed as per Government Notice No 29 of 2012 of the EMA.

3.1 NATIONAL LEGISLATION

TABLE 4 - LEGAL COMPLIANCE

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Constitution of the Republic of Namibia of 1990	The Constitution of the Republic of Namibia, 1990 clearly defines the country's position in relation to sustainable development and environmental management. The constitution refers that the state shall actively promote and maintain the welfare of the people by adopting policies aimed at the following: *"Maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present, and future ..."*	The proponent is committed to engage the local community for the proposed project by providing local opportunities, as well as exploring for recourses that could be to the benefit of Namibians.
Minerals (Prospecting and Mining) Act, No. 33 of 1992	Provides for the reconnaissance, prospecting and mining for, disposal of, and the exercise of control over minerals in Namibia. Section 50 (i) requires *"an environmental impact assessment indicating the extent of any pollution of the environment before any prospecting operations or mining operations are being carried out and an estimate of any pollution, if any, likely to be caused by such prospecting operations or mining operations"* Section 50 sets out that in addition to any term and condition contained in a	The proposed activity is prospecting for minerals; hence it requires an EIA to be carried out as it triggers listed activities in the Environmental Management Act and its regulations. This report presents the findings of the EIA. Work shall not commence until all conditions in the Act are met, which includes an agreement with the landowners and conditions of compensation have been agreed. The project shall be compliant with Section 76. With regards to records,

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
	mineral agreement and any term and condition contained in any mineral licence, it shall be a term and condition of any mineral licence that the holder of such mineral licence shall: – Exercise any right granted to him or her in terms of the provisions of this Act reasonably and in such manner that the rights and interests of the owner of any land to which such licence relates are not adversely affected, except to the extent to which such owner is compensated. Section 52 sets out that the holder of a mineral licence shall not exercise any rights conferred upon such holder by this Act or under any terms and conditions of such mineral licence (a) In, on or under any private land until such time as such holder. (i) Has entered into an agreement in writing with the owner of such land containing terms and conditions relating to the payment of compensation, or the owner of such land has in writing waived any right to such compensation and has submitted a copy of such agreement or waiver to the Commissioner.	maps, plans and financial statements, information, reports, and returns submitted. As the proponent will need to access privately owned land the proponent will ensure Sections 50 and 52 are complied with.
Environmental Management Act, (No. 7 of 2007) and its regulations, including the Environmental Impact Assessment	The Act aims to promote sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment. It sets the principles of environmental management as well as the functions and	This environmental scoping report (and EMP) documents the findings of the environmental assessment undertaken for the proposed project, which will form part of the environmental clearance application. The assessment and report have been

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Regulation, 2007 (No. 30 of 2012)	powers of the minister. The Act requires certain activities to obtain an environmental clearance certificate prior to project development. The Act states an EIA may be undertaken and submitted as part of the environmental clearance certificate application. The MEFT is responsible for the protection and management of Namibia's natural environment. The Department of Environmental Affairs under the MEFT is responsible for the administration of the EIA process.	undertaken in line with the requirements under the Act and associated regulations.
Water Act, No. 54 of 1956	Although the Water Resources Management Act, No 11 of 2013 has been billed, but not promulgated, it cannot be enacted as the regulations have not been passed – so the Water Act 54 of 1956 is still in effect. This act provides for *"the control, conservation and use of water for domestic, agricultural, urban and industrial purposes; to make provision for the control, in certain respect and for the control of certain activities on or in water in certain areas".* The Department of Water Affairs within the Ministry of Agriculture Water and Land Reform (MAWLR) is responsible for the administration of the Act. The Minister may issue a permit in terms of the regulations 5 and 9 of the government notice R1278 of 23 July 1971 as promulgated under section 30 (2) of the Water Act no. 54 of 1956, as amended.	The Act stipulates obligations to prevent pollution of water. Should wastewater be discharged, a permit is required. The EMP sets out measures to avoid polluting the water environment. Measures to minimise potential groundwater and surface water pollution are contained in the EMP. Abstraction of water from boreholes requires an abstraction permit. Abstraction rates need to be measured and reported to the authorities in accordance with the requirements of this legislation. In addition, annual reporting on the environmental impacts of water abstraction is recommendable. Should the project require drilling and abstraction of water from underground sources, an application should be submitted to the authorities.
Soil Conservation	Makes provision for the prevention and control of soil erosion and the	This will be taken into consideration during the intention of the works to

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Act, No. 76 of 1969) and the Soil Conservation Amendment Act, No. 38 of 1971)	protection, improvement and the conservation, improvement and manner of use of the soil and vegetation.	be undertaken within EPL 7971 site. Measures in the EMP set out methods to avoid soil erosion.
The Forestry Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005	Section 22 requires a permit for the cutting, destruction or removal of vegetation that are classified under rare and or protected species; clearing the vegetation on more than 15 hectares on any piece of land or several pieces of land situated in the same locality which has predominantly woody vegetation; or cut or remove more than 500 cubic metres of forest produce from any piece of land in a period of one year.	The planned project activities will include minimal vegetation clearing to support exploration activities. The necessary permit should be obtained from the MEFT, where the application should satisfy that the cutting and removal of vegetation will not interfere with the conservation of soil, water or forest resources.
National Heritage Act, No. 27 of 2004.	The Act provides provision of the protection and conservation of places and objects with heritage significance. Section 55 stipulates that exploration companies must report any archaeological findings to the National Heritage Council after which a heritage permit needs to be issued	There might be potential for heritage objects to be found on site, therefore the stipulations in the Act have been taken into consideration and are incorporated into the EMP. Section 55 compels exploration companies to report any archaeological findings to the National Heritage Council after which a permit needs to be issued before the find can be disturbed. In cases where heritage sites are discovered the 'chance find procedure' will be used

3.2 National Regulatory Regime

TABLE 5 - NATIONAL POLICIES

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Vision 2030	Vision 2030 sets out the nation's development programmes and strategies to achieve its national objectives. It sets out eight themes to realise the country's long-term vision. Vision 2030 states that the overall goal is to improve the quality of life of the Namibian people to a level in line with the developed world.	The planned project shall meet the objectives of Vision 2030 and shall contribute to the overall development of the country through continued employment opportunities.
The Fifth National Development Plan (NDP5)	NDP5 is the fifth in the series of seven five-year national development plans that outline the objectives and aspiration of Namibia's long-term vision as expressed in Vision 2030. NDP5 is structured on the pillars of economic progression, social transformation, environmental sustainability and good governance. Under the social transformation pillar is the goal of improved education.	The planned project supports meeting the objectives of NDP5 by creating specialised or skilled opportunities for employment to the nearby community and the Namibian nation.
Minerals Policy	The Minerals Policy was adopted in 2002 and sets guiding principles and direction for the development of the Namibian mining sector while communicating the values of the Namibian people. It sets out to achieve several objectives in line with the sustainable development of Namibia's natural resources. The policy strives to create an enabling environment for local and foreign investments in the mining sector and seeks to maximise the benefits for the Namibian people from the mining sector while encouraging local participation, amongst others. The objectives of the Minerals Policy are in line with the objectives of the Fifth National Development Plan that include reduction of poverty, employment creation and economic	The objectives of the Minerals Policy are in line with the objectives of the NDP5, e.g., reduction of poverty, employment creation, and economic empowerment in Namibia. The proposed project conforms to the policy, which has been considered through the EIA process and the production of this report.

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
	empowerment in Namibia.	
Labour Act, No. 11 of 2007	The Labour Act, No. 11 of 2007 (Regulations relating to the Occupational Health & Safety provisions of Employees at Work promulgated in terms of Section 101 of the Labour Act, No. 6 of 1992 - GN156, GG 1617 of 1 August 1997).	The proposed project will comply with stringent health and safety policies, including the compulsory use of specific PPE in designated areas to ensure adequate protection against health and safety risks. Proper storage and labelling of hazardous substances are required. The project will ensure employees in charge of and working with hazardous substances needs to be aware of the specific hazardous substances in order not to compromise worker and environmental safety.

3.3 PERMITS AND LICENCES

3.3.1 EXCLUSIVE PROSPECTING LICENCE

The EPL 7971 was granted on the 14th of September 2020 and expires on the 13th of September 2023. In terms of the Minerals (Prospecting and Mining) Act, No. 33 of 1992, an EPL may be renewed; however, it may only be extended twice for two-year periods if demonstrable progress is shown. Renewals beyond seven years require special approvals from the Minister MME, 2018.

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

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

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

TABLE 6 - PERMITS AND LICENCES REQUIREMENTS

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

3.4 WORLD BANK STANDARDS

The 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

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

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

4.2 EXPLORATION

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

4.3 EXPLORATION METHODOLOGY

Exploration work will be entirely conducted by dedicated professional geological, geophysical consultants as well as drilling consultants and companies.

The exploration activities are executed and managed from the Votorantim Main Office in Windhoek. Field exploration activities, using techniques as discussed below, are anticipated to be carried out over the licence validity period.

Existing tracks shall be used as far as reasonably practical. 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, if necessary 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 (i.e., Boscia *albitrunca* and the Aloidendron *dichotomum* also known as the Kokerboom), 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 schedule of activities that may be undertaken for the project is presented in Table 6.

TABLE 7 - SCHEDULE OF ACTIVITIES THAT MAY BE UNDERTAKEN

PHASE	DATE	ACTIVITY DESCRIPTION
Phase 1	Exact commencement date unknown	Planning – Remote sensing studies and planning phases for the prospecting programme will require two-six months.
Phase 2	Exact commencement date unknown	Geochemical sampling will be undertaken concurrently with geological mapping for approximately two-six months.
Phase 3:	Exact commencement date unknown	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. 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, IP and magnetic ground surveys shall be undertaken to measure chargeability, conductivity and magnetic susceptibility of the rocks. 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 the exploration office in Otavi. Contractor's camp infrastructure may include tents and chemical toilets, to be temporarily set up on the site. 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 as and when needed.

4.3.3 WORKERS AND ACCOMMODATION

Four to eight possible job opportunities are foreseen during the exploration phase and workers will be sourced from the nearest town or settlement. The workers will be deployed

at various stages of exploration including soil sampling, geological mapping, geophysical surveys and drilling operations.

It is envisaged that the workers of a drilling consultant company may reside onsite in non-permanent housing structures (i.e., tents or container homes) under controlled conditions whilst drilling and core logging takes place. The proponent will provide transport for employees to and from the site. The possibility also exists for the employees to stay in existing housing rented from the property owners should this become a necessity and mutually agreed upon between the exploration company and the landowner. The proponent shall provide suitable living facilities during this period.

4.3.4 WATER DEMAND

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. Limited water will be needed for the first stage of exploration (e.g., soil sampling), $1m^3$ per day of water will be required for geophysical surveys. In the second stage of exploration an approximate volume of $30m^3$ per day of water may be required for diamond drilling.

The EPL is located in a water-scarce landscape receiving less than 100m of rain per annum. With the persistent drought conditions experienced by farmers in the area, some boreholes have dried up, putting more pressure on the survival of livestock and human clusters in the area. Should the aquifer not yield sufficient quantities of water to service the exploration program, alternative temporary arrangements should be put in place by the proponent. This may include carting water in from elsewhere.

4.3.5 WASTE MANAGEMENT

Waste produced on site will include sewerage and solid waste such as packaging material. Wastewater (e.g., water with drill additives) used during drilling is recycled, contained in a lined sump and allowed to evaporate after use. The drill-sludge will be disposed of at the nearest municipal waste disposal site, in Rehoboth. In case of the provision of 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.

4.3.6 SITE REHABILITATION

Once exploration activities are completed the areas shall be rehabilitated to a condition as close to the original state of the site as far as possible. Rehabilitation shall be determined during the exploration programme and shall be agreed with the landowners and authorities

as implied by legislation (discussed in Section 3). Before and after photographs will be used to monitor rehabilitation success.

4.4 ALTERNATIVES CONSIDERED

The proposed project has been subject to a process of design evolution, informed by both consultation and an iterative environmental assessment. In terms of the Environmental Management Act, No. 7 of 2007 and its regulations, alternatives considered should be analysed and presented in the scoping assessment and ESIA 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 following more invasive technique is envisaged at strategic locations as informed by new data:

- Diamond core drilling.

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

4.4.1 NO-GO ALTERNATIVE

Should exploration activities within EPL 7971 not take place, the anticipated environmental impacts from exploration activities would not occur, however, the social and economic benefits associated with the project for the Khomas Region would also not be materialized.

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

5 ENVIRONMENTAL AND SOCIAL BASELINE

5.1 INTRODUCTION

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 as part of the scoping stage to get information of the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed project can be measured.

5.2 SITE AND SURROUNDING ENVIRONMENT

The Weissenfels guestfarm is situated about 30km east of the project area and can be accessed from the C26 trunk road south of the EPL. The C26 run through the EPL and flows into the C14 inside the Namib Naukluft National Park. A number of district roads crisscross the Khomas Region, while a network of farm roads and tracks provide access to the EPL from the C26 (Figure 4). The C26 road which is the main access road to the EPL contains a section of road that meanders through the Gamsberg landscape that does not accommodate two-directional traffic lanes throughout to the EPL, and therefore traffic movement challenges may be experienced within this section at some point by road users and should be managed proactively by the proponent. The C26 road broadens out towards the east to Windhoek and generally has better road surface conditions.

A number of sites of interest exist within and outside the surface area of the EPL. These are:

1. The Rooisand Observatory and the Rooisand desert ranch and campsite are situated within the centre of the EPL. A possible site of heritage importance (Lat:-23.1723 Long: 16.0638) consisting of bushmen rock paintings is located within the north-eastern corner of the EPL and should be treated as an exclusion zone.
2. The Gamsberg Nature Reserve overlaps the eastern portion of the EPL and covers the Gamsberg mountain, its slopes and a portion of the eastern flatlands.
3. The High Energy Stereoscopic Telescope station is situated further east of the EPL and not anticipated to be directly affected by the project.
4. Smaller guestfarms are situated south and west of the EPL as well.

EPL 7971 overlaps with 19 private farms of which some are used as guest farms (Figure 5). The farms have well-kept boundary fences with tracks, which can be used for access and movements during the exploration activities. The EPL lies in a region that receives between 50-100ml annual rainfall, which allows for mainly livestock and game (i.e., oryx, kudu and springbok) farming in the area.

Pro-active communication between the proponent, farmers, tour operators and neighboring property owners, need to be maintained when planning to access the EPL and to keep them updated on exploration activities throughout.

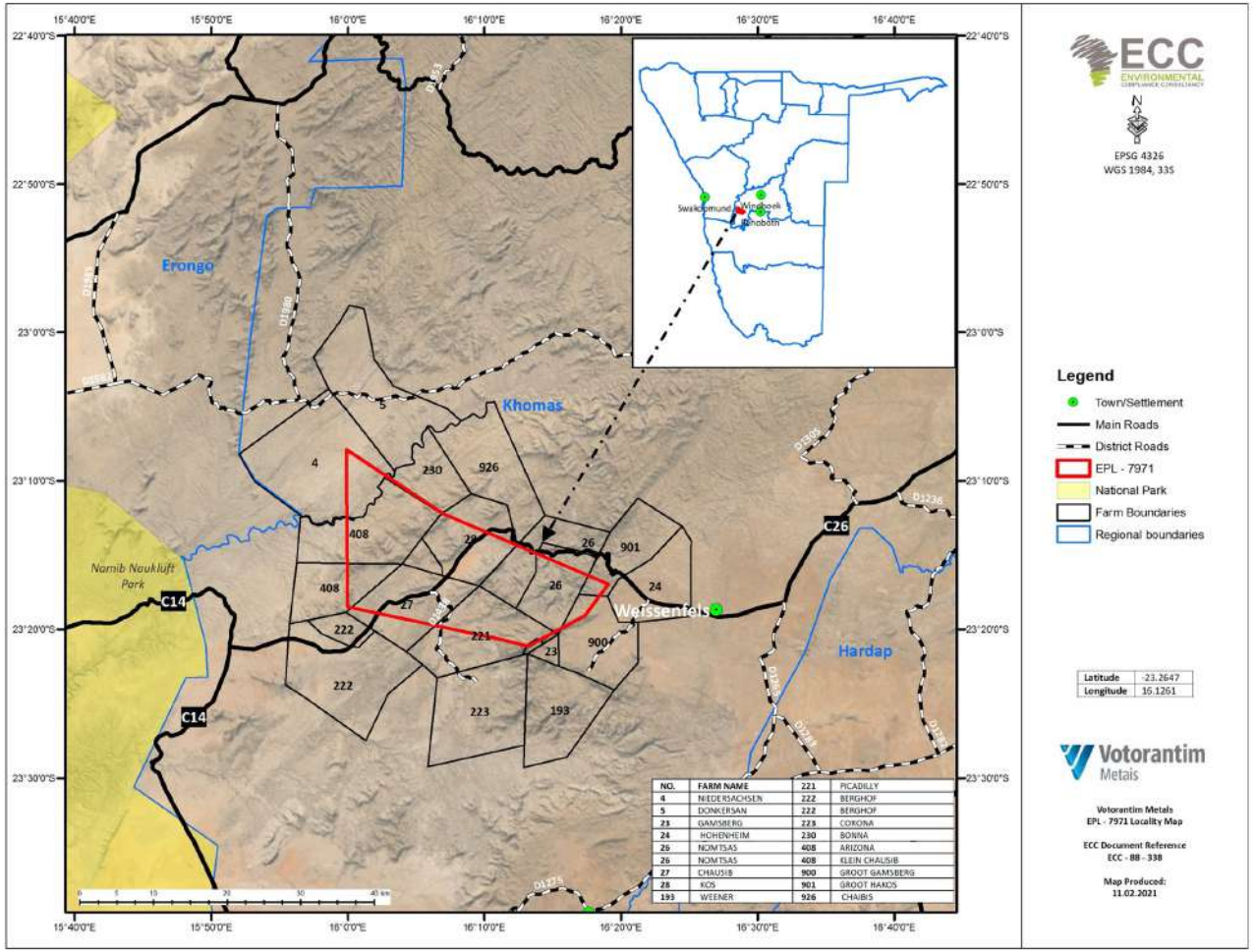


FIGURE 5 - ACCESSIBILITY MAP OF EPL 7971

5.3 CLIMATE

EPL 7971 is located in a part of Namibia which receives between 50 and 100 mm of rain per year, with a variation coefficient of 80-90%. Rainfall events are limited to the summer months, mainly between January and March, in the form of thunderstorms often associated with heavy downpours up to 300mm. Potential evaporation is between 2,100 and 2,240 mm per year, meaning an average water deficit of between 2,100 and 2,300 mm per year may occur. 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 28 - 30°C, mainly recorded during the afternoons between December and February, while minimum temperatures are around 8 - 10°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 7971 is expected to be from the southeast, with occasional airflow from the northeast. Wind speed is expected to be low with more than two-thirds of the time lower than 6 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 over the more drier and grassland filled landscapes.

Predominant wind direction is from the southeast, with an average wind speed of 3.3 mps (meters/second), and a calm of 5% (Figure 6) (Iowa State University, 2021).

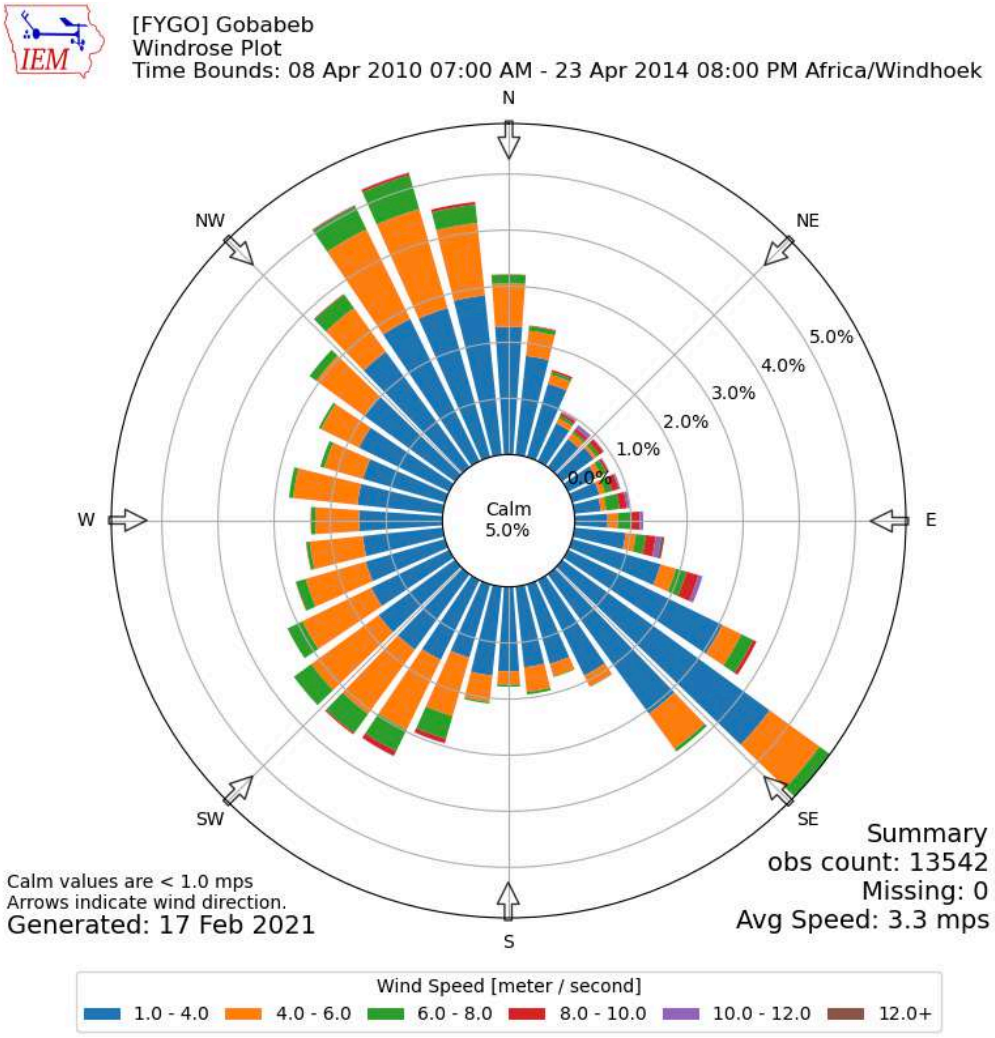


FIGURE 6 - PREVAILING WIND DIRECTION AND WIND SPEED NEAR THE AREA OF THE PROPOSED PROJECT (SOURCE: IOWA STATE UNIVERSITY, 2020).

5.4 GEOLOGY AND GEOMORPHOLOGY

The local geology of EPL 7971 mainly comprises units of the Hakos Group, which forms part of the Damara Supergroup and Gariep Complex (Figure 7). The Damara Supergroup covers the largest part of the west central quarter of Namibia and is oriented in a predominantly SW-NE direction (Mendelsohn et al, 2002). High elevated rocky intrusions of the older Rehoboth group cover the centre of the EPL. It is within these older complexes that base and rare metal deposits may be found. Part of the Gamsberg mountain range overlaps onto the eastern half of the EPL.

The lowest part of the EPL (Northern tip) is covered by units of the Khomas group with incised streams crisscrossing this landscape.

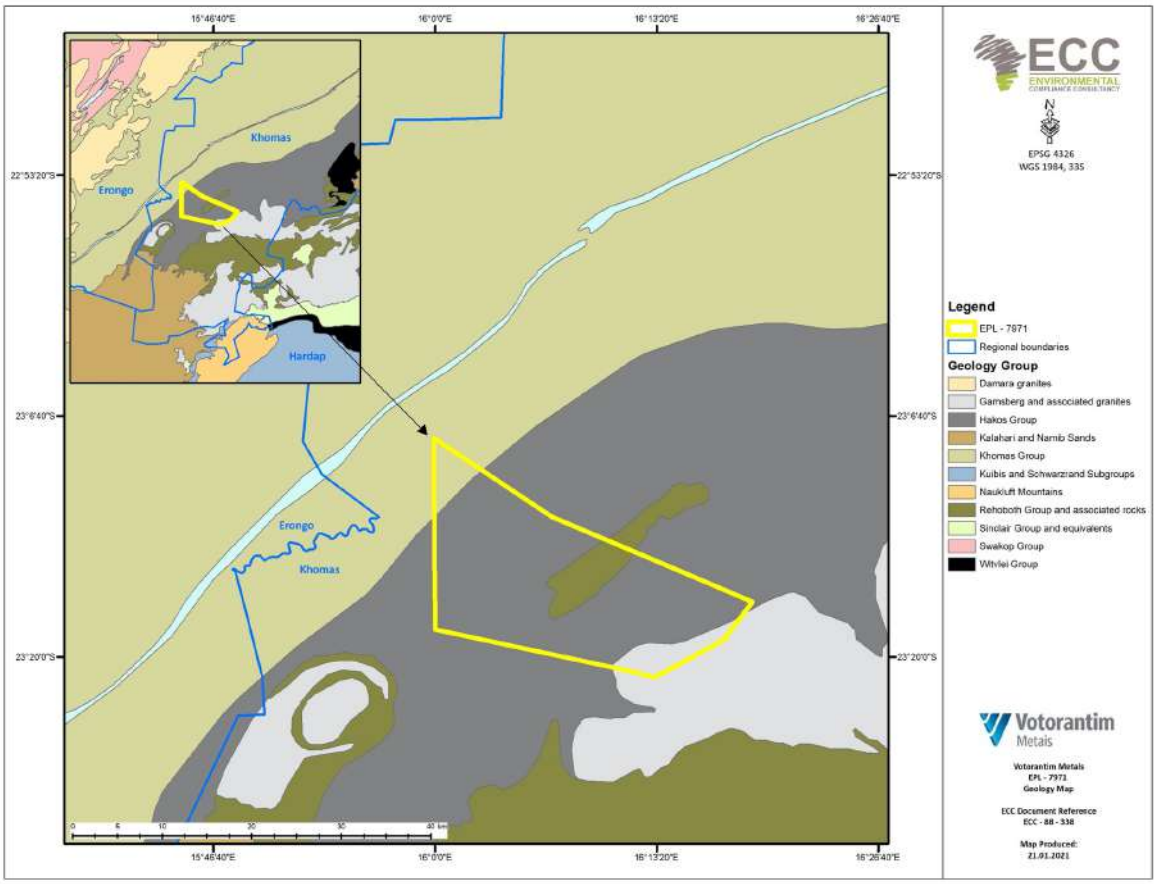


FIGURE 7 - EPL 7971 REGIONAL AND LOCAL GEOLOGY

5.5 TOPOGRAPHY AND SOIL

EPL 7971 is located on an elevation varying between 807 and 2354m above mean sea level (Figure 8). The landscape is rugged with some sharp topographical contrasts (dolerite outcrops) i.e. The Gamsberg mountain and ridges, framing a relatively flat valley floor in the centre of the EPL. The C26 road traverses this valley landscape through the EPL. Generally, there is a rise in elevation from north to south, with the highest readings on the southern part of the EPL.

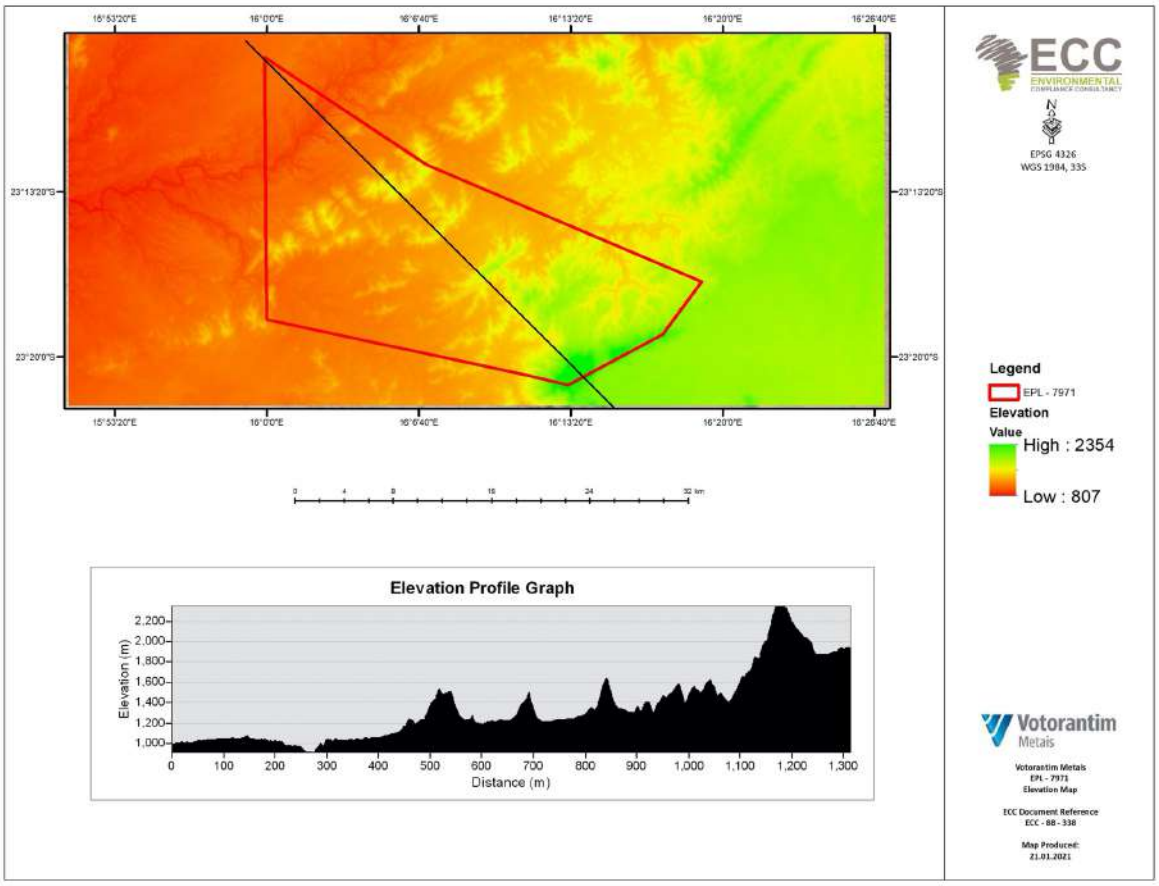


FIGURE 8 - ELEVATION PROFILE ALONG EPL 7971

Topsoil in the project area is largely absent where the surface is covered with rocky outcrops, especially along the entire southern and northern perimeter of the EPL, with shallow leptosols covering the entire landscape within the EPL (Figure 8). Mollic leptosols, typically associated with eroding hilly and undulating landscapes, is the dominant soil type covering the EPL. These soils are marked by a shallow soil profile (indicating little influence of soil-forming processes) and contain large amounts of gravel. Leptosols are coarse-textured, underlain by solid rock within 30 cm from the surface. The soil is thus poorly developed and thin, lacks appreciable quantities of accumulated clay and organic material and is susceptible to erosion during the rainy season, especially in the beginning of the rainy season when vegetation cover is sparse. As the topsoil is loose and thin, it is also susceptible to wind erosion, especially when the vegetation cover is sparse (Mendelsohn et al, 2002). This type of soil is not suitable for agricultural purposes. The sources of dust associated with the proposed exploration activities are land clearing and creation of access road. These activities may have a minor impact on the neighboring farming community.

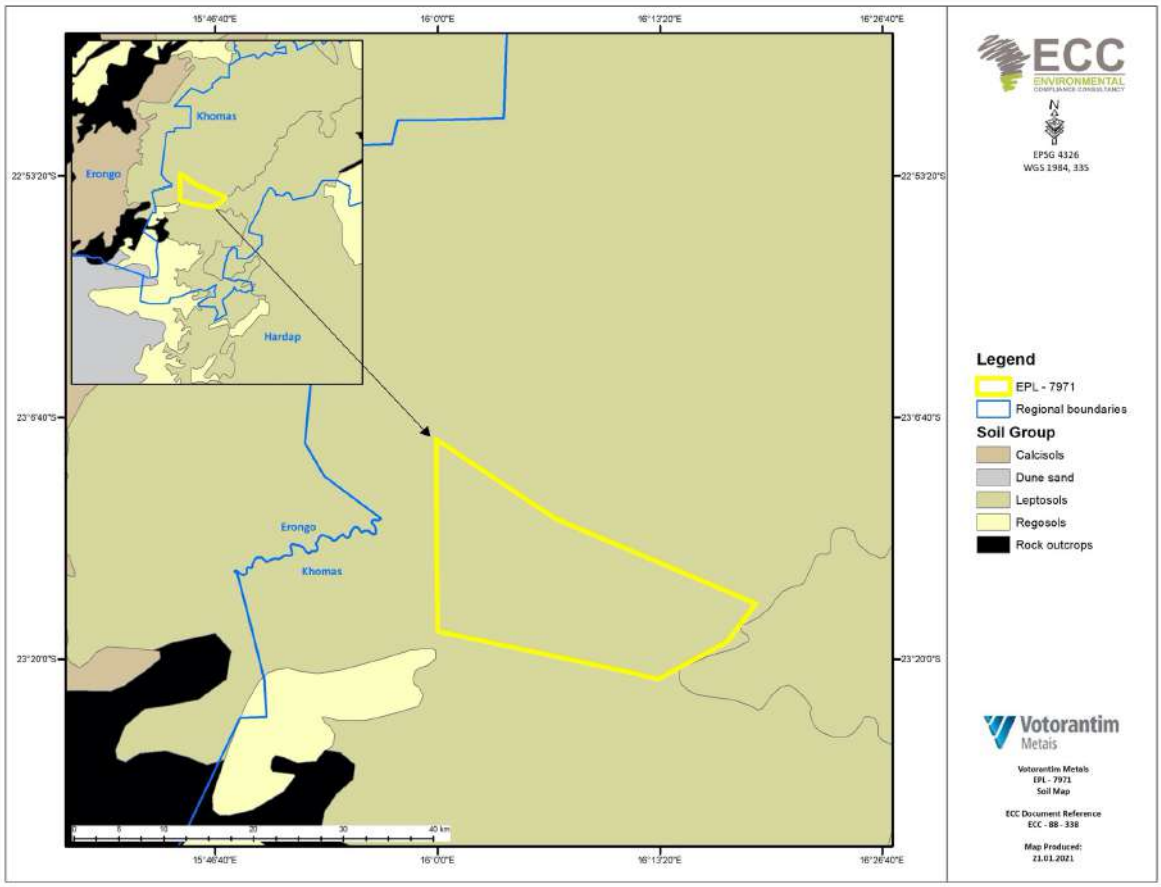


FIGURE 9 - EPL 7971 REGIONAL AND LOCAL SOIL MAP

5.6 HYDROLOGY

The surface hydrology through EPL 7971 follows a relatively dendritic pattern which develops on relatively uniform surface materials and form part of a broader 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. The ephemeral Chausib River flows through the southern half of the EPL.

5.6.1 GROUNDWATER

The farms located within and nearby EPL 7971 obtain water from borehole abstraction. There are 20 boreholes within the EPL 7971 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, however the precautionary principle should be applied, nevertheless. Should the project require the drilling and abstraction of water from an additional borehole, an application must be submitted to the MAWLR.

5.6.2 GROUNDWATER FLOW

Groundwater flow in the area takes place mainly along fractures and contact zones within hard rock formations. Groundwater in the area flows in a southeasterly direction as inferred from historical groundwater data.

EPL 7971 is located entirely on the Kuiseb basin (Figure 10). The area is underlain by an aquifer that has little to no groundwater potential (Mendelsohn et al., 2002) with a possible increase potential where fractures and faults may occur on a local scale (Mendelsohn et al., 2002). Twenty privately owned boreholes are recorded to have been sunk on the EPL, although not all may hold water currently. Groundwater in the vicinity of the EPL has experienced a decline over recent years due to the persistent drought conditions over the project area despite good rains during the last rainy season and has rendered some boreholes dry. Therefore, the proponent may need to ascertain water from alternative sources to supply its exploration program if need be.

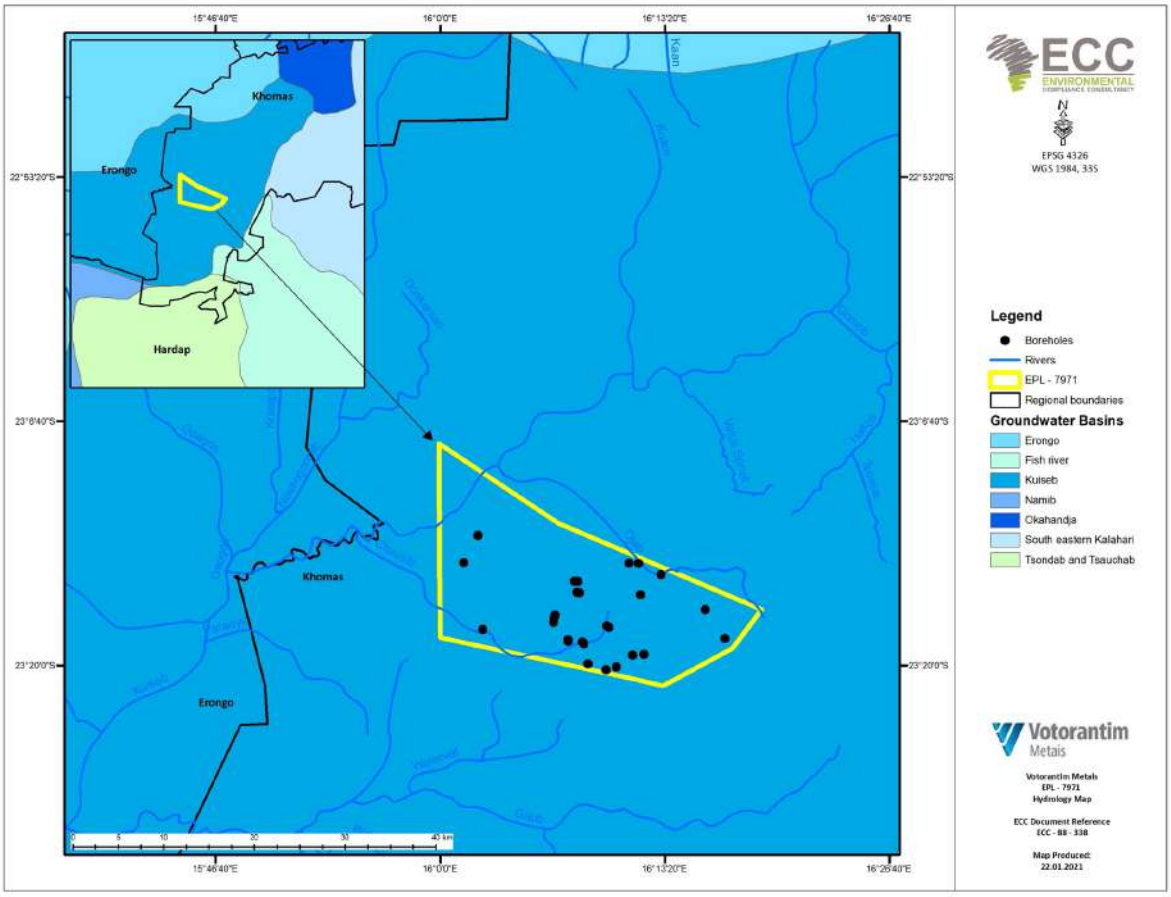


FIGURE 10 - HYDROLOGY MAP OF THE EPL 7971

5.7 BIODIVERSITY

5.7.1 VEGETATION

The EPL falls within the Nama-Karoo Biome (Figure 11) with a vegetation type broadly classified as a western highlands structure constituting varied shrubland and grasslands, known as the dwarf shrub savanna. Rhigozum *trichotomum* is a very characteristic shrub of this vegetation type (WWF, 2021, n.d.).

In some places plant growth become progressively shrubby, especially where the soils are shallower, slopes are steeper and where it is hillier and rockier (Mendelsohn et al, 2002). Thorny Acacia species dominate but a number of species are closely associated with the higher elevations only.

Different species that might be encountered on the EPL include, Parkinsonia *africana*, Acacia *nebrownii*, Boscia *foetid*a, Catophractes *alexandri* and smaller Pentzia spp. Furthermore, Eriocephalus spp. are likewise ordinary. Tufted grasses, basically Stipagrostis spp., are found dispersed between the woody plants. On the rougher slopes, the prominent quiver tree is found (WWF, 2021).

The most important environmental variable affecting vegetation is rain, but micro-habitat conditions and rangeland management practices determine bush density and grass composition. Grazing resources are made up of a wide variety of grass species, which vary widely in palatability and in their abundance.

Plant diversity is estimated to be between 150-299 species (Mendelsohn et al, 2002), although local differentiation as a result of topography and the availability of water is possible. This is a lower average occurrence of plant diversity in Namibia; however, some endemics, near-endemics and protected species may potentially occur (i.e., Kokerboom and Boscia *albitrunca*). Biophysical baseline information does not accentuate the uniqueness of mountain vegetation and the diversity of plants species may converge on relatively small areas in which there are several habitats and niches offered by micro-climate, elevation and sheltered spaces.

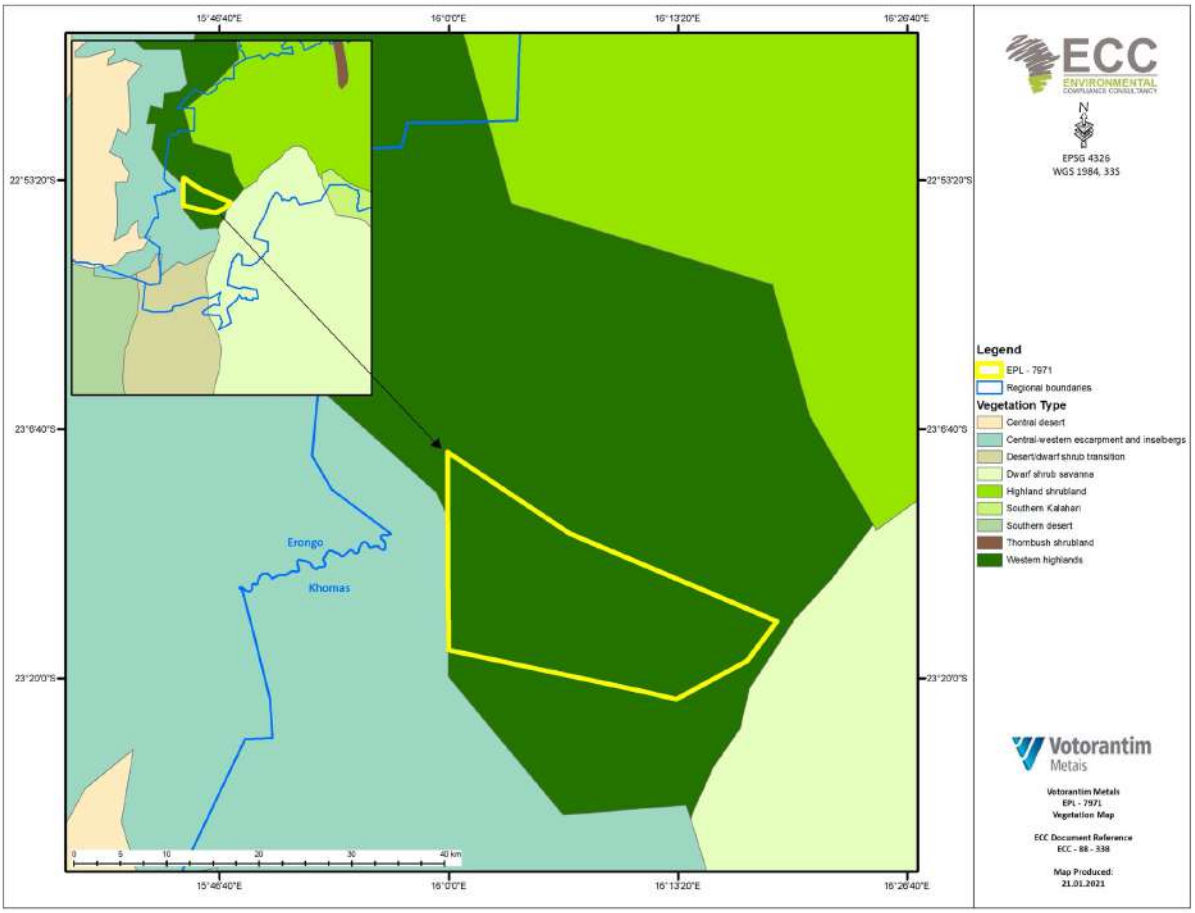


FIGURE 11 - EPL 7971 REGIONAL AND LOCAL VEGETATION MAP

5.7.2 FAUNA SPECIES

Overall terrestrial biodiversity over the EPL area is regarded as low (Mendelsohn., et al, 2002). The number of mammal species ranges between 61 and 75, the number of bird species is between 141 and 170, with 31 – 40 reptile species, 1 – 3 frog species and 18 – 21 scorpion species that could be expected (Mendelsohn et al, 2002). High scorpion diversity reflects the presence of a greater range of habitats compared with surrounding areas. 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 in the general area plays a prominent role in this regard and is directly related to the increase in terrestrial diversity.

The dominant land use within and on the surroundings of the EPL is livestock farming and tourism activities (i.e., star gazing at the Rooisand observatory and the HESS site).

5.8 SOCIO-ECONOMIC BASELINE

The entire EPL is located within the Khomas Region located in the central western part of Namibia, bordering the Erongo Region - west., the Hardap Region – east and the !Karas Region – south.

5.8.1 DEMOGRAPHIC PROFILE

Namibia is one of the least densely populated countries in the world (2.8 people per km^2). Vast areas of Namibia are without people, in contrast to some fairly dense concentrations, such as the central-north and along the Kavango River. The Khomas Region has the third highest amount of people per square kilometre - 9.3 per square kilometres (NSA, 2011).

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 inter-censal demographic survey was conducted in 2016 and estimated the total population at 2.3 million (NSA, 2017).

The current total population of the region was estimated at 447,636 in 2016 (NSA, 2019). Windhoek is the biggest town in the region and also the capital city of Namibia, recording ±400 000 residents and growing at an average of 4.4% per annum.

5.8.2 GOVERNANCE

Namibia is divided in 14 regions, subdivided by 121 constituencies. The Khomas Region is divided into ten constituencies. The EPL area falls within the Solitaire constituency. Each region has a regional council, elected during regional elections per constituency. Towns are governed through local authorities, in the municipal, town or village councils. Many of the region's head offices are located in the Windhoek.

5.8.3 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 for 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).

There are more than 428 recorded private health care facilities in the Khomas Region and none of them are located close to the project area (Choi, et. Al., 2015). There are 33 public health care facilities that provide basic health services at a minimum frequency and facility based 24-hour delivery services, with qualified staff. The basic services include outpatient curative care services for sick children and for adult STIs, temporary methods of family planning, antenatal care, child immunisation, and growth monitoring (NHFC, 2009).

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.

5.8.4 EMPLOYMENT

The Khomas Region's labour force participation rate was 73.9.1%, compared to the average of 71.2% for Namibia. Wages and salaries represented the income source of 68.3% of households (NSA, 2018). As a whole the region was marked by low education levels, which affected employability and prevented many households to earn 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 Khomas region was 16.3%, while the unemployment rate for people between 15 and 34 years of age was 54.4% in 2018, higher than the national average of 46.1% (Namibian Statistics Agency, 2018).

Low education levels affect employability and prevents many households to earn a decent income. Of all people employed in Namibia, 63.5% are not higher qualified 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 that junior secondary. The unemployment rate of persons with no formal education is 28.6%, with primary education 34.6% and with junior secondary education 32.7% (NSA, 2019).

5.8.5 Economic activities

The economy of the Khomas Region is predominantly service based and to a lesser extent agriculture driven. Extensive livestock farming forms the livelihood of many rural people in the EPL area. Large parts of the region outside the urban node of Windhoek 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. Although the region is rich in mineralised rock formations, no tangible large scale extractive operations are present in the region.

Since 2016, Namibia recorded slow economic growth, registering an estimated growth of only 1.1% in 2016. The primary and secondary industries contracted by 2.0 and 7.8% respectively. During 2017 the economy contracted by 1.7, 0.7 and 1.9% in the first, second and third

quarters respectively (NSA, 2019). Despite the more positive expectations, the economy retracted to an average growth of not more than 1% annually since 2017.

5.8.6 CULTURAL HERITAGE

In Namibia several mountains are closely coupled to heritage values, and it is possible that this applies to the Gamsberg mountain range as well. This mountain range form part of the north – escarpment zone. According to Dr Kinahan's research, the general area overlapped by EPL 7971 has been the focus of several intensive archaeological surveys relating to recent pre-colonial copper mining and smelting activity along the Matchless amphibolite belt (2021). Within EPL 7971 there are archaeological sites recorded comprising of isolated artefact finds of no significance. These finds are associated with copper production during the last 250 years and located within a dense concentration of sites in the north-eastern corner of the EPL (Kinahan,2021).

In cases where heritage sites are discovered through exploration activities 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.

5.8.7 NOISE AND SENSE OF PLACE

EPL 7971 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, e.g., water installations, fences, tracks and buildings. Sensitive receptors associated with the EPL area may include farm owners and farm workers, 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, minor landscape scars and visual obtrusions (i.e., heavy machinery and a campsite). This may alter and affect the lifestyle of receptors, although the exploration activities are short-term and reversible.

EPL 7971 lies over 19 farms, and it is likely that noise 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 will 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

6.1 INTRODUCTION

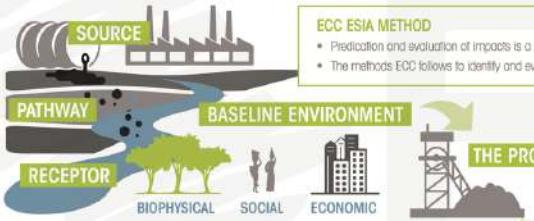
This chapters outlines ECCs method to identify and evaluate impacts arising from the proposed project. The findings of the assessment are presented in Chapter 7.

The evaluation and identification of the environmental and social impacts require the assessment of the project characteristics against the baseline characteristics, ensuring all potentially significant impacts are identified and assessed. The significance of an impact is determined by taking into consideration the combination of the sensitivity and importance or value of environmental and social receptors that may be affected by the proposed project, the nature and characteristics of the impact, and the magnitude of potential change. The magnitude of change (the impact) is the identifiable changes to the existing environment which may be negligible, low, minor, moderate, high, or very high; temporary or short term, long-term or permanent; and either beneficial or adverse.

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.

IMPACT PREDICATION AND EVALUATION



ECC ESIA METHOD

- Predication and evaluation of impacts is a key step in the EIA process.
- The methods ECC follows to identify and evaluate the impacts arising from projects is outline in this diagram.

THE FOLLOWING PRINCIPLES ARE USED BY ECC FOR ASSESSMENTS

- International Finance Corporation 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);
- International Finance Corporation CIA and Management Good Practice Handbook (International Finance Corporation, 2013) and;
- Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008).

DETERMINE THE SIGNIFICANCE OF AN IMPACT

SENSITIVITY AND VALUE OF A RECEPTOR
The sensitivity and value of a receptor is determined by identifying how sensitive and vulnerable a receptor is to change, and the importance of a receptor (internationally, nationally, locally)

NATURE AND CHARACTERISTICS OF THE IMPACT
The nature and characteristics of the impact is determined through consideration of the frequency, duration, reversibility and probability of the impact occurring.

MAGNITUDE OF CHANGE
The magnitude of change measures the scale or extent of the change from the baseline condition, irrespective of the value. The magnitude of change may alter over time, therefore temporal variation is considered (short-term, medium-term, long-term, reversible, reversible environmental assessment methodology.

ECC – NATURE OF IMPACT

BENEFICIAL (POSITIVE) (+)
An impact that is considered to represent an improvement on the baseline or introduces a positive change.

ADVERSE (NEGATIVE) (-)
An impact that is considered to represent an adverse change from the baseline or introduces a new undesirable factor.

REVERSIBILITY

REVERSIBLE
Impacts are reversible and recoverable in the future

PARTLY REVERSIBLE
Some parts of the impact can be reversed while others remain

IRREVERSIBLE
Impacts which are not reversible and are permanent

DURATION

TEMPORARY
Transient; a period of less than 1 year

SHORT TERM
Impacts that are likely to last for the duration of the activity causing the impact and are recoverable (1-5 years)

MEDIUM TERM
Impacts that are likely to continue after the activity causing the impact and are recoverable (5-15 years)

LONG TERM
Impacts that are likely to last far beyond the end of the activity causing the damage (greater than 15 years with impact ceasing after decommissioning of the project)

PERMANENT

SCALE OF CHANGE - EXTENT / GEOGRAPHIC SCALE

ON-SITE
Impacts that are limited to the boundaries of the proposed project site

LOCAL
Impacts that occur in the local area of influence, including around the proposed site and within the wider community

REGIONAL
Impacts that affect a receptor that is regionally important by virtue of scale, designation, quality or rarity.

NATIONAL
Impacts that affect a receptor that is nationally important by virtue of scale, designation, quality or rarity.

INTERNATIONAL
Impacts that affect a receptor that is nationally important by virtue of scale, designation, quality or rarity.

ECC – TYPE OF IMPACT

DIRECT
Impacts causing an impact through direct interaction between a planned project activity and the receiving environment/ receptors.

INDIRECT
Impacts that result from other activities that are encouraged to happen as a result / consequence of the Project. Associated with the project and may occur at a later time or wider area

CUMULATIVE
Impacts that arise as a result of an impact and effect from the project interacting with those from another activity to create an additional impact and effect

MAGNITUDE OF CHANGE

VERY HIGH / UNKNOWN	Loss of resource, significantly affecting the long term quality and integrity of a resource; irreparable damage or loss of key characteristics, features or elements; or the magnitude is too great to quantify as it is unknown.
HIGH / MAJOR	Loss of resource, and quality and integrity of resource; severe damage to key characteristics, features or elements; or Large scale or major improvement of resources quality; extensive restoration or enhancement, major improvement of attribute quality.
MODERATE	Loss of resource, but not adversely affecting its integrity; partial loss of/damage to key characteristics, features or elements; or Benefit to, or addition of, key characteristics, features or elements; improvements of attribute quality.
LOW / MINOR	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (or maybe more) key characteristic, feature or element; or Minor benefit to, or addition of, one (or maybe more) key characteristic, feature or element, some beneficial effect on attribute quality or a reduced risk of a negative effect occurring.
NONE / NEGLIGIBLE	Very minor loss or detrimental alteration to one (or maybe more) characteristic, feature or element; or Very minor benefit to, or positive addition of, one (or maybe more) characteristic, feature or element.

PROBABILITY

IMPROBABLY (RARE)	LOW PROBABILITY (UNLIKELY)	MEDIUM PROBABILITY (POSSIBLE)	HIGH PROBABILITY (LIKELY)	DEFINITE (ALMOST CERTAIN)
The event may occur in exceptional circumstances yet, rarely occurs in the industry. The event could occur once every 100 years	The event has happened elsewhere yet, is unlikely to occur. The event could occur once every 10 years	The event could occur under some circumstances. The event could occur once every 5 years.	The event is expected to occur. The event could occur twice per year	The event will occur. The event could occur once per month

- To ensure the beneficial impacts are brought out in the assessment, green has been applied to ensure the different type of impact is clear.
- The significance of impacts has been derived at by applying the identified thresholds for receptor sensitivity and magnitude of change, as well as the definition of significance. Moderate and major adverse impacts are considered as significant.
- The following thresholds were therefore used to double check the assessment of significance had been applied appropriately: a significant impact would meet at least one of the following criteria:
- It exceeds widely recognized levels of acceptable change;
- It threatens or enhances the viability or integrity of a receptor or receptor group of concern; and
- It is likely to be material to the ultimate decision about whether or not the environmental clearance certificate is granted.

			SIGNIFICANCE OF IMPACT			
		Significance of Impact	Impacts are considered to be local factors that are unlikely to be critical to decision-making	Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short-term, reversible and/or localized in extent.	Impacts are considered within acceptable limits and standards. Impacts are long-term, but reversible and/ or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/ features that are unique and which, if lost, cannot be replaced or relocated.	Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/sensitive resource/receptors. Impacts are expected to be permanent and non-reversible on a national scale and/ or have international significance or result in a legislative non-compliance.
	Biophysical	***Social***		***Low***	***Minor (2)***	***Moderate (3)***	***Major (4)***
SENSITIVITY	A biophysical receptor that is protected under legislation or internation convention (CITIES) listed as rare, threatened or endangered IUCN specicies. Highly valued/ sensitive resource/ receptors.	Those affected people/ communities will not be able to adapt to changes or continue to maintain pre-impact livelihoods.	***High (3)***	***Minor (3)***	***Moderate (6)***	***Major (9)***	***Major (12)***
	Of value, importance/ rarity on a regional scale, and with limited potential for substitution; and/or not protected or listed (globally) but may be a rare or threatened species in the country; with little resilience to ecosystem changes, important to ecosystem functions, or one under threat or population decline.	Able to adapt with some difficulty and maintain pre-impact status but only with a degree of support	***Medium (2)***	***Low (2)***	***Minor (4)***	***Moderate (6)***	***Major (8)***
	Not protected or listed as common/abundant; or not critical to other ecosystems functions.	Those affected are able to adapt with relative ease and maintain pre-impact status. There is no preceptible chnage to people's livelihood.	***Low (1)***	***Low (1)***	***Low (2)***	***Minor (3)***	***Moderate (4)***

SENSITIVITY AND VALUE

Low
Of value, importance or rarity on a local scale; and/or not particularly sensitive to change or has considerable capacity to accommodate a change.

Medium
Of value, importance or rarity on a regional scale, and with limited potential for substitution; and/or moderate sensitivity to change, or moderate capacity to accommodate a change.

High
Of value, importance or rarity on an international and national scale, and with very limited potential for substitution, and/or very sensitive to change or has little capacity to accommodate a change.

MITIGATION

Mitigation comprises a hierarchy of measures ranging from preventative environmental impacts by avoidance, to measures that provide opportunities for environmental enhancement. The mitigation hierarchy is avoidance; reduction of source; reduction at receptor level; repairing and correcting; compensation; remediation; and enhancement.

Mitigation measures can be split into three distinct categories, broadly defined as:

- Standard practices and other best practice measures for avoiding and minimizing environmental impacts. These are considered as good practice measures.
- Actions undertaken by the EIA process that influence the design process, through implementing design measures that would entirely avoid or eliminate an impact or modifying the design through the inclusion of environmental features to reduce the magnitude of change. These are considered as embedded mitigation.
- Specified additional measures or follow-up action to be implemented to further reduce adverse impacts that remain after the incorporation of embedded mitigation. These are considered as additional mitigation.

The EIA is an iterative process whereby the outcomes of the environmental and social assessments inform the project. The EMP provides the good practice mitigation measures and specified additional measures or follow-up action ECC has recommended for the project.

LOW – MAJOR (BENEFICIAL)

Impacts are considered to be beneficial to the environment and society:

Low (negative) 0 - 25
Impacts are considered to be local factors that are unlikely to be critical to decision-making.

Minor (negative) 25 - 50
Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short-term, reversible and/or localized in extent.

Moderate (negative) 50 - 75
Impacts are considered within acceptable limits and standards. Impacts are long-term, but reversible and/ or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/ features that are unique and which, if lost, cannot be replaced or relocated.

Major (negative) 75 - 100
Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/sensitive resource/receptors. Impacts are expected to be permanent and non- reversible on a national scale and/or have international significance or result in a legislative non- compliance.

6.2 Assessment Guidance

The principal documents used to inform the assessment method are:

- International Finance Corporation 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);
- International Finance Corporation CIA and Management Good Practice Handbook (International Finance Corporation, 2013); and,
- Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008).

6.3 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.

A number of limitations and uncertainties were acknowledged during the EIA process. In line with EIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed. Table 6 contains the assumptions and uncertainties identified during the assessment process.

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

TABLE 8 - LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

LIMITATION / UNCERTAINTY	ASSUMPTION
Number of access roads and temporary drill campsites	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.
The program of exploration works is not confirmed	It is assumed that exploration work shall take a couple of months with two-to-three-week sampling projects at different times on different sites and with follow-up exploration drilling projects

LIMITATION / UNCERTAINTY	ASSUMPTION
	possible. Activities involve drilling; aerial or remote sensing; geophysical surveys; and mineral sampling. Pitting and trenching are unlikely and generally not favoured. If commercially viable concentrations can be defined by preliminary drilling, a next phase of advanced resource drilling operations is possible.
Number of workers, area they will come from and accommodation	It is planned that approximately four to eight people will be contracted for the proposed project. Most of the employees will stay within a controlled campsite on the EPL; contractors may camp on exploration sites / farms, depending on approval from farm owners.
Structures	No permanent infrastructure development will take place in the greenfield phase of operations which will span the 3-year award period. Depending on results, the proponent will set up temporary field camps required to house field staff for the purpose of sample collection, ground surveys and drilling. The camps will be such that their locations can be fully rehabilitated post completion of the field work.

7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MEASURES

This chapters outlines ECCs method to identify and evaluate impacts arising from the proposed project. The findings of the assessment are presented in Chapter 7.

The evaluation and identification of the environmental and social impacts require the assessment of the project characteristics against the baseline characteristics, ensuring all potentially significant impacts are identified and assessed. The significance of an impact is determined by taking into consideration the combination of the sensitivity and importance or value of environmental and social receptors that may be affected by the proposed project, the nature and characteristics of the impact, and the magnitude of potential change. The magnitude of change (the impact) is the identifiable changes to the existing environment which may be negligible, low, minor, moderate, high, or very high; temporary or short term, long-term or permanent; and either beneficial or adverse.

This chapter provides the following:

- Water (surface - and groundwater);
- Soil;
- Landscape (visual impacts, sense of place);
- Socio-economics (employment, demographics, and land-use);
- Noise;
- Ecology (fauna and flora);
- Air quality (emissions, pollutants and dust); and
- Heritage (including culture, history and archaeology).

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

Due to the nature and localised scale of the exploration activities, and the environmental context of the EPL, the potential environmental and social effects are limited and unlikely to be significant. Aspects that prompted uncertainty relate to the potential increase in movements and the presence of people, which may cause the introduction of illegal and covert activities such as poaching, stock theft and the collection of organisms. Similarly, the potential of accidental veld fires may increase. In both cases the terrestrial ecology and biodiversity of Namibia is the receptor, although local landowners and their neighbours may experience these adversities firsthand. The recommended mitigation measures are contained in Table 8.

Cumulative impacts as a result of physical disturbance, the nuisance of noise and dust and the loss of sense of place may be experienced as well; in this case the receptors are the landowners, neighbours, visitors and tourists. Noise may have an effect on some organisms as well, though. Mitigation measures are recommended and contained in Table 8.

The impacts to the groundwater reserve of the area because of possible additional abstraction may contribute to the short-term disturbance to water security of the area and should be managed appropriately.

All precautions must be taken to prevent damage to heritage sites, in particular when a site with archaeological remains is discovered as a result of the exploration activities. The “chance find” procedure as outlined in the EMP will be implemented in such a case. With the necessary mitigation measures in place (Table 8), the significance of the impact reduces from moderate to minor.

TABLE 9- SCOPING ASSESSMENT FINDINGS AND PROPOSED MITIGATION MEASURES

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Site operations such as maintenance activities, loss of containment, accidental fuel / hydraulic fluid leaks and spills, or similar sources.	**Groundwater quality**	Hydrocarbon leaks and spills could enter the aquifer causing contamination.	Adverse Direct Partly Reversible Moderate Short term Regional Possible	Medium	Minor	Minor (4)	- Good housekeeping - Training through toolbox talks and induction - All stationary vehicles and machinery must have drip trays to collect leakages of lubricants and oil - Spill kits and absorption material available during fuel delivery, storage or use - Accidental spills and leaks (including absorption material) to be cleaned as soon as possible - Major spills to be	Low (2)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							reported, also to the authorities - Maintenance and service schedules on equipment is in place - Store bulk fuel in adequate containment areas (non-porous surface, bunded) - No damaged containers in use - Preventative measures will be in place when service and maintenance activities are done (drip trays, non-porous surfaces, funnels, non-damaged containers)	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- Refuelling will be done in areas with adequate preventative measures in place	
Potential spillages of drill fluid, lubrication, etc. or drilling that penetrate the groundwater table.	**Groundwater quality**	Hydrocarbon leaks and spills could enter the aquifer causing contamination.	Adverse Indirect Partly Reversible Minor Short term Local Possible	Low	Minor	Low (2)	- Ensure spill kits and preventative measures (e.g. drill pads) are in place at exploration sites - Consider alternative sites when water table is too high - Drill system should be dug to direct any accidental spills into sumps - Extraction volumes of water shall be minimal during exploration and	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							where possible, water from existing water sources shall be used	
Discharge and infiltration of non-contained wastewater	**Water**	Wastewater can contaminate surface and groundwater	Adverse Direct Partly Reversible Minor Short term Regional Unlikely	Low	Minor	Low (2)	- Wastewater discharges will be contained - Workers will be made aware about the importance of wastewater management - Good housekeeping - Ensure prompt clean-up of spills	Low (1)
Inadequate management of solid waste	**Water**	Waste items and litter can pollute drainage channels	Adverse Cumulative Reversible Minor Temporary	Low	Low	Low (1)	- Good housekeeping - Training and awareness through toolbox-talks and induction	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
			On-site Unlikely				- Implement a Standard Operational Procedure (SOP) on waste management, for all kinds of waste possible on-site (e.g., domestic, mineral, hydrocarbons, hazardous) - Avoid hazardous waste on site - Implement a culture of correct waste collection, waste segregation and waste disposal	
Inadequate management of hazardous and hydrocarbon waste	**Soil**	Pollution of soil	Adverse Direct Reversible Minor Short term On-site Possible	Low	Minor	Low (2)		Low (1)
Vegetation clearing for access routes, drill pads and temporary contractors	**Terrestrial ecology and biodiversity**	Loss / alteration of terrestrial habitats and loss of species	Adverse Direct Reversible Minor	Low	Minor	Low (2)	- Use existing roads for access to avoid new tracks and cut lines - Minimise clearance areas through proper	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
camp			Short term On-site Possible				planning of the exploration activities - Where necessary, rescue and relocate plants of significance - Promote revegetation of cleared areas upon completion of exploration activities	
Ambient noise as a result of machinery and equipment-use and movement (e.g., drill rigs, generators, vehicles) and movement (also through	**Terrestrial ecology and biodiversity**	Residing, slow-moving and nesting organisms can be disturbed	Adverse Direct Reversible Minor Short term On-site Likely	Low	Minor	Low (2)	- Restrict excessive noise to areas of activities only - Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday) - No activities between	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
the use of airborne equipment)							dusk and dawn - Drill equipment shall be suitably positioned to ensure that noisy equipment is away from receptors - All equipment to be shut down or throttled back between periods of use, - Respect civic aviation regulations about the use of a drone	
Increased movement of vehicles, machinery and equipment	**Terrestrial ecology and biodiversity**	Residing and nesting organisms such as reptiles can be disturbed, injured or killed	Adverse Direct Partly reversible Moderate Short term	Low	Minor	Low (2)	- Restrict movements to areas of activities only - Use existing tracks and routes only	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
			On-site Possible				- Identify rare, endangered, threatened and protected species in advance - Route new tracks around protected species and sensitive areas - Restrict movements to daytime hours - Make workers aware and notify them on avoiding some areas - No driving off designated access routes (into the bush) / off-road driving - No animals or birds may be collected, caught, consumed or	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							removed from site	
Increased disturbance of areas with natural vegetation	**Terrestrial ecology and biodiversity**	Alien species and weeds can be introduced to the area	Adverse Direct Reversible Minor Short term On-site Possible	Low	Minor	Low (2)	- All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (not present on the project site) should have an internal weed and seed inspection completed prior to equipment being used - Monitor areas of activity for weed and alien species - Eradicate weeds and alien species as soon as they appear	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- Make workers aware about alien species and weeds	
Vegetation clearing	**Soil**	Increased exposure due to possible vegetation clearance can cause soil erosion	Adverse Direct Reversible Moderate Short term On-site Possible	Low	Minor	Low (2)	- Ensure erosion control and prevention measures are in place when vegetation clearance is required - Where necessary, plan access routes, drill pads and camps outside of existing drainage lines - Where necessary, install diversions to curb possible erosion - Restore drainage	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							lines when disturbed	
Drilling and the use of drilling equipment	**Soil**	Loss of soil quality due to mixing of earth matter, trampling and compaction	Adverse Direct Reversible Moderate Short term On-site Possible	Low	Minor	Low (2)	- Limit the possibility of compaction and creating of a hard subsurface - Limit the possibility of trampling - Topsoil should be stockpiled separately, and re-spread during rehabilitation - During drilling oil absorbent matting should be placed under and around the rig - Equipment must be in a good condition to ensure that accidental oil spills do not occur and	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							contaminate soil - In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site - Limit the possibility to mix mineral waste with topsoil	
Terrestrial ecology and biodiversity	Accidental and uncontrolled fire	Destroys grazing and kill living organisms	Adverse Direct Reversible Moderate Temporary Local Possible	High	Minor	Moderate (6)	Restrict movements of people to areas of activities only Train people and raise awareness about veld fires and firefighting No open fire outside designated areas Ensure proper cooking facilities at fly camps	Minor (3)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							No cigarette buds are discarded but contained and disposed of at an appropriate facility Proper fire hazard identification signage to be placed in areas that store flammable material (e.g., hydrocarbons and gas bottles) Control and reduce the potential risk of fire by segregating and safe storage of materials Avoid potential sources of ignition by prohibiting smoking in and around facilities - Firefighting equipment and fire	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							breaks should always be at designated areas and should be maintained regularly	
Community and livestock	Airborne surveying over the EPL, possible low flying	Perceived impact from surveying activities flying low over on livestock and humans	Adverse indirect Reversible Minor Temporary Local Unlikely	Low	Minor	Low (2)	- Prior to conducting aerial surveying, both directly and indirectly affected parties should be informed in writing of exploration activities at least 2 weeks prior to conducting the aerial surveys. The following information is to be included in the written communication sent – Company name, – Survey dates, time and duration, – Purpose of the	**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							survey, – Flight altitude, – Survey location, Map of survey area and flight lines, and – Contact details for enquiries. Compliance with all applicable laws and agreements Maintain continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon Ensure appropriate supervision of all activities - Restrict surveying	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							activities to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday)	
Drilling activities, movement of machinery and vehicles	**Heritage**	Potential damage to cultural heritage sites	Adverse Direct Partly Reversible High Permanent On-site Possible	High	Minor	Moderate (6)	- Implement a Chance Find Procedure - Raise awareness about possible heritage finds - Report all finds that could be of heritage importance - In case archaeological remains are uncovered, cease activities and the site manager has to assess and demarcate the area - Project manager to visit the site and determine whether work can proceed without damage to	Minor (4)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							findings, mark exclusions boundary and inform ECC with GPS position - If needed, further investigation has to be requested for a professional assessment and the necessary protocols of the Chance Find Procedure have to be followed, - Archaeologist will evaluate the significance of the remains and identify appropriate action, (record and remove; relocate or leave premises, depending on the nature and value of the remains), - Inform the police if the remains are human,	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- Obtain appropriate clearance or approval from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.	
Drilling activities, resulting into dust emissions …… Windblown dust from exposed/cleared land during exploration activities	**Community**	Visual disturbance and loss of Sense of Place	Adverse Direct Reversible Moderate Temporary Local Likely	High	Minor	Moderate (6)	– Position drill equipment in such a way that it is out of sight from human receptors – Apply dust suppression where possible – Restrict speed of vehicles (<30km/h) – Specific activities that may generate dust and impact on	Minor (4)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							residents shall be avoided during high wind events – All vehicles and machinery / equipment to be shut down or throttled back between periods of use – Barriers or fences shall be used if 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	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							– Maintain good housekeeping – Continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon	
Movement of vehicles, exploration activities	**Community**	Create conflict with farm owners and neighbours about access, leaving gates open, suspicious movements, loss of farming area,	Adverse Indirect Reversible Minor Short term On-site Likely	Low	Minor	Low (2)	– Ensure documented permission to enter farms – Farmers should have access to all farm areas at all times – Residents shall be provided at least two weeks' notice of	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		etc.					drilling operations within 1 km of their property – Existing water points and feeding area need to be left unaffected – Use existing roads for access, avoid new tracks / cut lines, – Compliance with all applicable laws and agreements – Continuous engagement with residents to identify any concerns or issues, and mitigation and management measures agreed upon	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Movement of vehicles, exploration activities	**Community**	Presence of exploration team can be blamed for stock theft, poaching and vandalism.	Adverse Cumulative Reversible Minor Temporary Local Unlikely	Low	Low	Low (1)	– Develop and implement an operations manual or procedures to work on private farms and implement monitoring programmes thereafter – Maintain continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon – Ensure appropriate supervision of all activities	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							– Raise awareness 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	
Exploration activities	**Community**	Triggers very limited job creation opportunities, skills development and opportunities for the local economy	Beneficial Direct Reversible Minor Short term Local Possible	Medium	Low	Low (2)	– Maximize local employment – As far as possible promote local procurement – Enhance development of local skills where possible	Low beneficial

7.1.1 Further Consideration: Groundwater impacts

Generally, exploration activities are not substantial users of water, nevertheless if operations are proposed to take place in areas where the baseline groundwater potential fluctuates between low and no groundwater, as in the current project area, it is vital that accurate estimations of aquifer characteristics be obtained first from pump tests conducted on existing boreholes in an area.

Through the application of the EIA methodology presented in Section 2, the conclusion of the assessment is that without detailed further information on the characteristics of the aquifer, the risk remains high for local groundwater abstraction to take place.

TABLE 10: SUMMARY OF EFFECTS

ACTIVITY	RECEPTOR	IMPACT	NATURE OF IMPACT	VALUE & SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT
Abstraction of groundwater for exploration work (i.e., drilling)	Groundwater	Additional abstraction may cause a reduction in groundwater capacity and yield on an already stressed	Adverse Direct Partly Reversible High/Major Medium term Local Possible	Medium	Moderate	**Moderate**

7.1.2 Further Consideration: Noise and Visual impacts

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, communication with the affected parties and key stakeholders 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 application of the EIA methodology presented in Section 2 the conclusion of the assessment is that with additional mitigation, the significance of effect is expected to be minor. No additional studies are considered necessary to further assess this impact.

TABLE 11 - SUMMARY OF EFFECTS

ACTIVITY	RECEPTOR	IMPACT	NATURE OF IMPACT	VALUE & SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT
Placement and operations of heavy machinery and drill rigs, equipment and the creation of laydown areas on site	Neighbours / farm owners / tourists	Visual impacts (obscure views, create visual contrast, dust, intrusive objects), movement of heavy machinery, nuisance (noise), loss of naturalness	Adverse Direct Reversible Local / on-site Short term Certain	Medium	Minor	Minor Adverse

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:

- Interested and affected parties will be communicated to prior to the commence of the exploration activities
- Reasonable time frames for duty will be place e.g., 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 e.g., 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 continual engagement with residents.

The potential impact therefore is not considered significant as it does not widely exceed 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 pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary.

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

The objectives of the EMP are:

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

9 CONCLUSION

ECC's EIA methodology was used to undertake the environmental assessment for the proposed exploration activities on EPL 7971, to identify if there is potential for significant effects to occur as a result of the proposed project.

Through the scoping process, a potential risk to groundwater capacity was determined and defined in terms of groundwater baseline information used and stakeholder communication. Mitigation in the form of additional pump tests on existing water bearing boreholes within the project area is recommended to be executed by the proponent, prior to the commencement of drilling activities.

The only other risk to the environment is related to the cumulative impacts as a result of physical disturbance, nuisance of noise and dust and the loss of sense of place, thereby impacting human receptors in the area. Impacts with respect to airborne dust are expected to be limited to vehicular traffic and drilling activities. There will be some release of exhaust fumes from machinery that will impact the immediate vicinity but will be of short duration. Additionally, there will be associated drilling and machinery noise, which could be a disturbance to immediate neighbours, but this will be of short duration as well. Through further analysis and identification of mitigation and management methods, the assessment concludes that the likely significance of effects on humans from the cumulative impacts of physical disturbance, noise, dust and emissions will be a temporary qualitative reduction in the sense of place and expected to be minor. Prior awareness and communication about the project shall be encouraged.

Due to the increased movements and presence of people, there is a potential that illegal and covert activities such as poaching, stock theft and the collection of organisms can be introduced to the area. Similarly, the potential of accidental veld fires may increase. In both cases the terrestrial ecology and biodiversity of Namibia is the receptor, although local landowners and their neighbours may experience these adversities firsthand. Through this investigation the significance of both impacts is indicated as moderate. In both cases numerous mitigation measures, with proven national success, exist and were also applied to reduce the significance to minor.

It is likely that more heritage sites of the same kind may exist in the wider landscape associated with the ridges of the Gamsberg mountain range. All precautions will be taken to prevent damage to heritage sites, as a result of the exploration activities. The chance find procedure will be implemented in such a case. With the necessary mitigation in place, the significance reduces from moderate to minor.

All other social and environmental receptors were scoped out as significant effects were unlikely and therefore no further assessment was deemed necessary. Various best practice

and mitigation measures have been identified to avoid and reduce effects as far as reasonably practical, as well as ensure the environment is protected and unforeseen effect and environmental disturbances are avoided.

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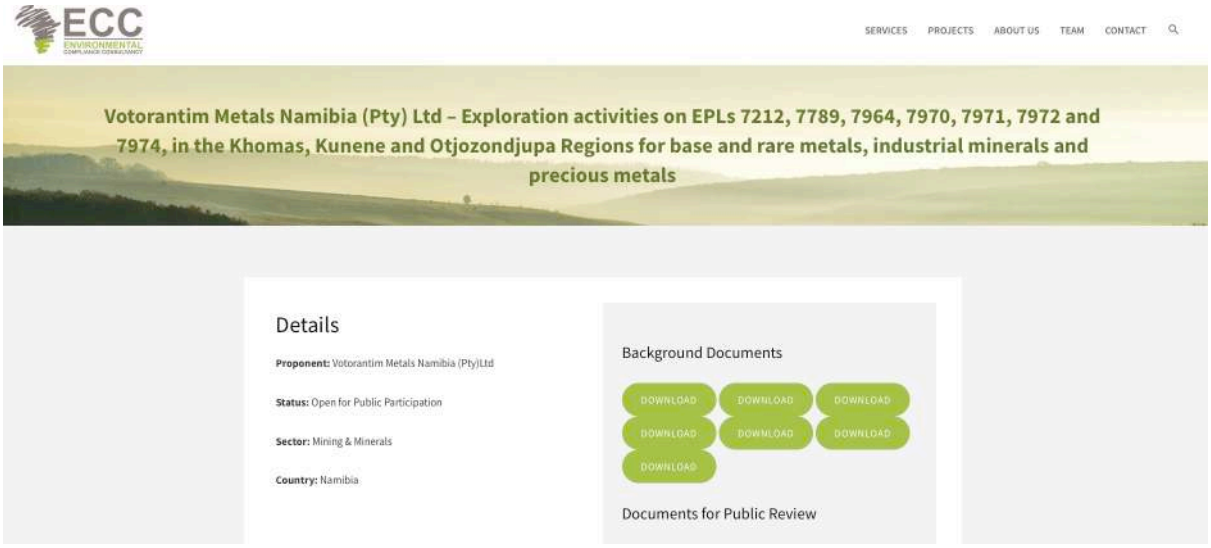
APPENDIX A- EMP

APPENDIX B - NON-TECHNICAL SUMMARY

Environmental Compliance Consultancy website:

www.eccenvironmental.com



APPENDIX C- EVIDENCE OF PUBLIC CONSULTATION

The following was advertised in the 'Republikein, Sun, and Allgemeine Zeitung' newspapers on the 16th February 2021.

Nigeria creates US$2.6 bn infrastructure company

Nigerian President Muhammadu Buhari's government has approved the creation of a company to fast-track development of critical infrastructure, with around US$2.6 billion in initial financing.
Africa's most populous country slipped into recession in its third quarter for the second time in four years, hit by the coronavirus pandemic and a fall in oil prices, and faces a huge infrastructure deficit.
"It is envisaged that, over time, the entity will grow to naira 15 trillion (US$39.3 billion), in assets and capital," a spokesman for Vice President Yemi Osinbajo said in a statement on Friday.

> ***It is envisaged that, over time, the entity will grow to naira 15 trillion (US$39.3 billion), in assets and capital***
>
> **Spokesman for Vice President Yemi Osinbajo**

The company, Infra-Co, will be one of the top infrastructure finance entities in Africa and will be wholly dedicated to Nigeria's infrastructure development, the statement said.
Infra-Co will operate as a public-private partnership and will be initially funded by the Central Bank of Nigeria, the Nigerian Sovereign Investment Authority and the Africa Finance Corporation.
It will focus on developing public assets and reconstruction as well as new roads, rail, power and other key infrastructure sector projects.
The IMF expects Nigeria's economy to contract by at least 3 percent this year, a situation many fears will further deepen the country's infrastructure crisis and worsen an economy already struggling with the impact of the pandemic.
Nigeria's senate last year approved nearly US$23 billion (18.9 billion euros) in foreign loan requests by Buhari to support a series of large-scale projects, which the government hopes will revamp the country's crumbling infrastructure.
Buhari early this week also launched a US$1.96 billion rail project linking to neighbouring Niger as the country looks to boost its growth.

- Nampa/AFP

Nigerian President Muhammadu Buhari. PHOTO NAMPA/AFP

Setting realistic goals

Vision 2030 to undergo review

Agriculture was contributing between 12 to 15 percent of GDP. It is now reduced to less than 4 percent. PHOTO NAMPA

The agriculture sector is at the heart of Namibia's development agenda going forward.

With nine years to go before the expiration of Namibia's grand development plan, Vision 2030, the government is reviewing the plan with a view to replacing it with one that speaks to the realities of the day.
This was announced by National Planning Commission (NPC) director, Obeth Kandjoze, at a recent media conference meant to inform the nation about the government's decision to liquidate the cash-strapped Air Namibia.
At this event, Kandjoze said: "We must actually craft a grand-visioning statement that will replace Vision 2030. We must review NDP 5 to be able to fit into the economy post-Covid-19."
Vision 2030 stipulates that Namibia plans to be a prosperous and industrialised nation, developed by her human resources, enjoying peace, harmony, and political stability by 2030. "We have assembled a team of experts led by the National Planning Commission, assisted by the Ministry of Finance and Bank of Namibia.
We have solicited the efforts and advice of Harvard University Growth Lab experts led by Professor Ricardo Hausmann, a very well renowned professional in the business of helping countries identify pitfalls in their setups from an economic structural point of view," Kandjoze said.
The growth lab works to understand the dynamics of growth and to translate those insights into more effective policymaking in developing countries.

National Planning Commission (NPC) director, Obeth Kandjoze. PHOTO NAMPA

Agriculture

Kandjoze also said Namibia must position itself strategically to benefit from the African Continental Free Trade Area Agreement (AfCFTA).
The former mines minister added: "We must have a stake in that vision. Going forward the economy is actually put at a display as to "what is agriculture achieving?"
"Agriculture was contributing between 12 to 15 percent of GDP. Today agriculture is reduced to less than 4 percent. What are the structural policy changes that should come in to begin to help the sector," he questioned? Additionally, he said agriculture is at the heart of Namibia's development agenda going forward.Other sectors such as mining are also under review.
"The idea is to understand where the impediments are in our economic structural set-up so we can do away with those impediments, review the policies, understand the future of the particular sort of market in agriculture, mining and so forth so that we can position the economy post-Covid-19," he noted.

- Nampa

NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR EXPLORATION ACTIVITIES ON EPLs 7212, 7789, 7964, 7970, 7971, 7972 AND 7974 KUNENE, OTJOZONDJUPA AND KHOMAS REGIONS, NAMIBIA

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

Applicant: Votorantim Metals Namibia (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Kunene, Otjozondjupa and Khomas regions, Namibia

Proposed Project Overview: The proponent proposes to carry out exploration activities for base and rare metals, industrial minerals, and precious metals on EPLs 7212, 7789, 7964, 7970, 7971, 7972 and 7974. The EPLs are located within three regions, the Kunene, Otjozondjupa and Khomas regions. Exploration methods may include geochemical survey (soil and rock sampling), geophysical survey (electromagnetic surveys), drilling and drill-core sampling.

I&AP 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 Non-Technical Summary (NTS), to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

The registration period is effective from **15 February to 01 March 2021**. I&APs and stakeholders are required to register for the project at: https://ecoenvironmental.com/projects/

The team at ECC will then maintain contact with all registered I&APs to keep them informed and engaged as the ESIA process develops. ECC will also provide registered I&APs relevant documents to review during the assessment process.

Environmental Compliance Consultancy
Registration Number: 60/2003/1604
Members: Mr JS Beuvinkhout or Mrs J Masters
PO Box 91293, Klein Windhoek
Tel: +264 81 669 7688
E-mail: info@ecoenvironmental.com
Project ID: ECC-88-388-ADT-32-A
Website: http://www.ecoenvironmental.com

Votorantim Metais

The following was advertised in the 'Republikein, Sun, and Allgemeine Zeitung' newspapers on the 23th February 2021.

2 Republikein Sun Allgemeine Zeitung Market Watch TUESDAY 23 FEBRUARY 2021

More tax revenue, minimised social welfare

SA's economic rebound to trim budget deficits

South Africa has a population of about 58.6 million. PHOTO NAMPA/AFP

South African President, Cyril Ramaphosa. PHOTO NAMPA/REUTERS

There are speculations that the national treasury could raise taxes more aggressively this year.

South Africa's consolidated fiscal deficit is expected to narrow this year because of an economic rebound, although the long-term trend of higher debt remains unchanged due to Covid-19 and pre-existing spending, a Reuters poll forecast on Friday.

In a poll taken this week, 2021 economic growth was expected to rebound to 3.5% after an estimated 7.4% contraction last year, probably bolstering revenue collections and narrowing deficits for the next financial year to 9.7% of gross domestic product, to 8.5% for 2022/23 and 7.5% in 2023/24.

As in other countries, Covid-19 spending doubled the South African budget last year. The 2020/21 deficit was estimated at 13.95% of GDP in the poll with only about six weeks left.

In October, the National Treasury's consolidated budget estimated a 15.7% deficit of GDP in the year ending March, 10.1% for next year, and 8.6% and 7.3% for the following years respectively.

Nedbank economists wrote that the 2020/21 budget was expected to be much better than presented in the medium-term budget statement in October from the National Treasury.

"Revenue collections have been better than estimated on the back of a stronger-than-expected economic rebound, while expenditure will be slightly lower than estimated, resulting in a narrower budget deficit," wrote Isaac Matshego at Nedbank.

"The budget deficit, however, will be relatively sticky in the medium term as actual expenditure cuts are unlikely to be achieved over the period."

A similar poll in October suggested South Africa's consolidated fiscal deficit would widen further than projected, three months before in an emergency Covid-19 budget, as a third-quarter rebound would not generate enough tax revenues.

Tax

Still, economists have noted speculation the national treasury could raise taxes more aggressively this year in various ways, including a wealth tax or temporary "solidarity" tax to fund things like Covid-19 vaccine procurement, alongside the usual nudges to sin and personal taxes.

However, the "treasury recognises the country's perceived onerous tax burden, not to mention the sharp knock to company profits that has continued to eat into corporate tax receipts in recent years," said Jeffrey Schultz at BNP Paribas.

Consumer inflation was expected to average 3.9% this year and 4.3% next year, still below the midpoint of the Reserve Bank's 3% to 6% comfort level.

"As a result, the main tax measures announced will be in the form of the usual above-CPI increases for excise duties and fuel levies, rather than anything that could risk damaging an already fragile and concentrated tax base," Schultz added.

Gross national debt was projected by the government to stabilise at 95.3% of GDP by 2025/26, more or less in line with the poll's median which expected it at 92.7% in 2023/24.

Growth was expected slow to 2.2% next calendar year and 1.7% the following year.

Interest rates were expected to remain unchanged at 3.5% this year, but the Reserve Bank was expected to raise them to 4.0% next year and to 4.75% in 2023. - Nampa/Reuters

ECC

NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR EXPLORATION ACTIVITIES ON EPLs 7212, 7789, 7964, 7970, 7971, 7972 AND 7974 KUNENE, OTJOZONDJUPA AND KHOMAS REGIONS, NAMIBIA

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

Applicant: Votorantim Metals Namibia (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Kunene, Otjozondjupa and Khomas regions, Namibia

Proposed Project Overview: The proponent proposes to carry out exploration activities for base and rare metals, industrial minerals, and precious metals on EPLs 7212, 7789, 7964, 7970, 7971, 7972 and 7974. The EPLs are located within three regions, the Kunene, Otjozondjupa and Khomas regions. Exploration methods may include geochemical survey (soil and rock sampling), geophysical survey (electromagnetic survey), drilling and drill-core sampling.

I&AP 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 Non-Technical Summary (NTS), to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

The registration period is effective from **15 February to 01 March 2021.**
I&APs and stakeholders are required to register for the project at: https://eccenvironmental.com/projects/

The team at ECC will then maintain contact with all registered I&APs to keep them informed and engaged as the ESIA process develops, ECC will also provide registered I&APs relevant documents to review during the assessment process.

Environmental Compliance Consultancy
Registration Number: CC/2013/11404
Members: Mr JS Bezuidenhout or Mrs J Mooney
PO Box 91193, Klein Windhoek
Tel: +264 81 669 7608
E-mail: info@eccenvironmental.com
Project ID: ECC-88-338-ADT-22-A
Website: http://www.eccenvironmental.com

Votorantim Metais

Paratus welcomes Demshi in subsea cable project

The Paratus landing station will host the Equiano undersea cable system transmission equipment. PHOTO CONTRIBUTED

STAFF REPORTER

The Cable Landing Station (CLS) houses the mission critical transmission equipment that will, in layman's terms, convert the seabed equipment to land-based equipment.

A typical undersea cable has repeater stations every 80kms along the route, that requires power to be provided.

Every CLS established along the route of the cable is capable of delivering enough power to carry the entire cable route, to mitigate potential risks where power might fail in a specific region.

Approximately 5000 watts, enough to power a typical 3-bedroom house.

The CLS further houses backup power equipment, such as A/B generator feeds.

The Paratus landing station will host the Equiano undersea cable system transmission equipment, which includes the Power Feeding Equipment (PFE) as well as the Submarine Line Terminal Equipment (SLTE). The Paratus landing station will also host cabinets where operators will be able to host their equipment, accessing the Equiano capacity purchased from within the landing station.

This will be an open-access network station, with no restrictions as to who can gain access to the capacity, as long as they are registered and licensed operators with the regulatory authority (CRAN).

SITE NOTICE

NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR EXPLORATION ACTIVITIES ON EPL 7789

KUNENE AND OTJOZONDJUPA REGIONS, NAMIBIA

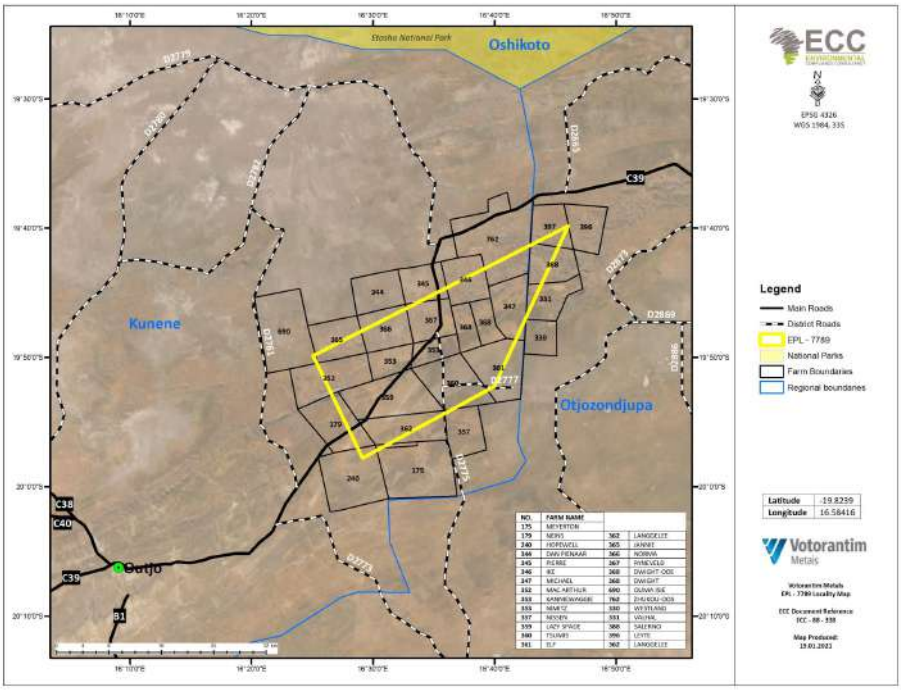
Environmental Compliance Consultancy cc (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in accordance with the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant:	**Votorantim Metals Namibia (Pty) Ltd**
Environmental Assessment Practitioner (EAP):	**Environmental Compliance Consultancy**
Project ID:	**ECC-88-338**

Project: Exploration activities on EPL 7789 for base and rare metals, industrial minerals, and precious metals in the Kunene and Otjozondjupa regions, Namibia.

Proposed activity: The proponent proposes to carry out exploration activities for base and rare metals, industrial minerals, and precious metals on EPL 7789. The EPL lies approximately 40km northeast of Outjo and can be accessed via the C39 trunk road. The EPL falls within the Kunene and Otjozondjupa regions. Exploration methods may include geochemical surveys (soil and rock sampling), geophysical surveys (electromagnetic surveys), drilling and drill-core sampling.

Location of EPL 7789:



Application for environmental clearance certificate: In terms of the Environmental Management Act No. 7 of 2007, ECC on behalf of the proponent is required to submit an application for environmental clearance to the competent authority and the Ministry of Environment, Forestry and Tourism for the above-mentioned project.

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

Contact: Mr JS Bezuidenhout or Mrs J Mooney
Environmental Compliance Consultancy
Registration Number CC/2013/11404
PO Box 91193, Klein Windhoek
Tel: +264 81 669 7608
E-mail: info@eccenvironmental.com
Website: http://www.eccenvironmental.com

APPENDIX D - ECC CVS

APPENDIX E: HERITAGE ASSESSMENT REPORT