ENVIRONMENTAL SCOPING REPORT

PROPOSED MINING OF BASE AND RARE METALS, PRECIOUS METALS AND SEMI PRECIOUS STONES ON MINING CLAIMS (MCs) NUMBER 73948 AND 73947 AT OTUANI VILLAGE, KUNENE REGION, NAMIBIA BY;

NEW HORIZON (PTY) ltd

OCTOBER-2024

EnviroPlan Consulting cc
....innovative planning for sustainability

Environmental and Social Impact Assessment (ESIA) scoping for proposed mining of base and rare metals, precious metals and semi-precious stones on mining claims (mc) number 73948 and 73947 at Otuani Village, Kunene Region, Namibia.

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Table 1: Acronyms

TERMS	DEFINITION
BID	Background Information Document
EAP	Environmental Assessment Practitioners
ECC	Environmental Clearance Certificate
EIA (R)	Environmental Impact Assessment (Report)
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
HAIA	Heritage and Archaeological Impact Assessment
ISO	International Organization for Standardization
I&APs	Interested and Affected Parties
MEFT: DEAF	Ministry of Environment, Forestry and Tourism's Directorate of Environmental Affairs and Forestry
NHC	National Heritage Council
NEMA	Namibia Environmental Management Act
MCs	Mining Claims
ORC	Opuwo Rural Constituency
ToR	Terms of Reference
UNFCCC	United Nations Framework Convention on Climate Change

DEFINITION OF TERMS

A **'Conservancy'** - consists of a group of commercial farms or areas of communal land on which neighbouring land owners or members have pooled resources for the purpose of conserving and using wildlife sustainably.

The **'Consultant'** – this refers to the team that is conducting the ESIA and the preparation of the EMP for the development

The **'Proponent** – this refers to the institutions/departments that are directly involved in the implementation of the project, i.e. MAWF.

The **'Stakeholders'** – this refers to the people, organisations, NGOs that are directly or indirectly affected and interested by the project.

The **'Environment'** – this refers to the ecology, economy, society and politics.

ENVIRONMENTAL IMPACT ASSESSMENT

EnviroPlan Consulting cc has been assigned by **New Horizon (PTY) ltd** to conduct an Environmental Impact Assessment (EIA) and develop an Environmental Management Plan (EMP) for the *proposed* mining activities on Namibian registered Mining Claims number(s) 73947 and 73948 in Otuani village, Kunene Region, Namibia. Proposed activities will include mining of base and rare metals, precious metals and semi-precious stones. Different appropriate mining methods will be used depending on the slope. Project site terrain has undulating steep slopes, rocky and mountainous at which experts will apply the most safe and economic mining methods.

The proposed activities triggered the application for an environmental clearance certificate.

Anticipated Environmental Impacts

- Low to medium potential environmental impacts associated with the proposed mining activities. An impact management plan has been developed to mitigate any anticipated possible impacts of the project to the environment.
- Relative or moderate social impact (positive)

Social Impact

The project is generally expected to improve the socio-economic environment of Otuani village and the entire Opuwo rural constituency through a major boost in business by means of integrations, employment and economic boosting. Interested and Affected Parties were notified of the project through site notices and newspaper adverts and the proof for consultation is covered in Chapter 4 and Appendix D of the report.

Recommendation

It is concluded that most of the impacts identified during this Environmental Assessment can be addressed through the recommended mitigation and management actions for the proposed mineral exploration activities.

Should the recommendations included in this report and the EMP be implemented the impacts can be reduced to reasonably acceptable standards and durations. All developments could proceed provided that general mitigation measures as set out are implemented to minimum levels.

In this respect, it is recommended that the proposed mining activities receives approval and receive Environmental clearance, provided that the recommendations described above and the EMP is implemented.

ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations underpin the approach to this EIA study:

- The information received from the stakeholders, desktop surveys and baseline assessments are current and valid at the time of the study;
- A precautionary approach was adopted in instances where baseline information was insufficient or unavailable;
- A regulated timeframe will apply to the review and decision making after the submission of the reports to the competent authority and other government departments; and
- The mining claims under study have been registered as (MCs) number 73947 and 73948 by Mr Hendrick Johannes Jacobus Fraser, a New Horizon shareholder**.**

NB: *The EAP does not accept any responsibility in the event that additional information comes to light at a later stage of the process. All data from unpublished research utilised for the purpose of this project is valid and accurate. The scope of this investigation is limited to assessing the potential biophysical, social and cultural impacts associated with the proposed project.*

1. CHAPTER ONE: BACKGROUND

1.1. Overview

The proponent, **New Horizon (PTY) ltd** has identified the economic potential of mineral deposits found in the Kunene Region targeting the administrative Otuani village of Opuwo rural constituency. The MC holder Mr Hendrick Johannes Jacobus Fraser has partnered with New Horizon (PTY) ltd (project proponent) to do mining of base and rare metals, precious metals and semi-precious stones on 33 hectares of communal land. Different appropriate mining methods will be used depending on the slope. Project site terrain has undulating steep slopes, rocky and mountainous at which experts will apply the most safe and economic mining methods.

As per the requirements of the Namibian environmental legislation (Environmental Management Act (No. 7 of 2007 and the Environmental Impact Assessment Regulations of 2012), an EIA is required to obtain an Environmental Clearance Certificate from the Ministry of Environment and Tourism (MET) before the proposed activities proceed. This is because under the 2012 Environmental Impact Assessment (EIA) Regulations of the Environmental Management Act (EMA) No. 7 of 2007, mining is a listed activity that may not be undertaken without an Environmental Clearance Certificate (ECC). This activity is listed under the following relevant sections:

Table 2: Listed Activities- Environmental Management Act No. 7 of 2007

ACTIVITY	RELEVANT SECTIONS
MINING AND QUARRYING ACTIVITIES	**- 3.1** The construction of facilities for any process or activities which requires a licence, right or other form of authorisation, and the renewal of a licence, right or other form of authorisation, in terms of the Minerals (Prospecting and Mining Act), 1992. **-3.2** Other forms of mining or extraction of any natural resources whether regulated by law or not. **-3.3** Resource extraction, manipulation, conservation and related activities. **-3.5** The extraction of a pit

1.2. The Environmental Consultant

New Horizon (PTY) ltd has appointed EnviroPlan Consulting cc as their Environmental Consultant to conduct an Environmental Impact Assessment (EIA) and develop an Environmental and Social Management Plan (ESMP) for the undertaking of proposed mining activities and to apply for an Environmental Clearance Certificate from MEFT through the directorate of Environmental Affairs.

1.3. Project Location

The Mining Claims (MCs) are located in Otuani, a small village in Kunene region. It is under the Opuwo Rural constituency\s area of jurisdiction. This constituency sits on 25, 758 square kilometres of land and has a population of 14 850. Economic activity in this area is centred on communal livestock farming and conservancies. Otuani is situated 70 kilometres (43 mi) southwest of the regional capital Opuwo along the C43 road to Omao. It is within the Ombujokanguindi Conservancy. It has the potential of becoming the mining hub of the Kunene region through the setting up or establishing a copper processing plant at Otuani. Other potential areas are tourist facilities, butchery and tannery factory, etc. Figure 1 below shows the locality map.

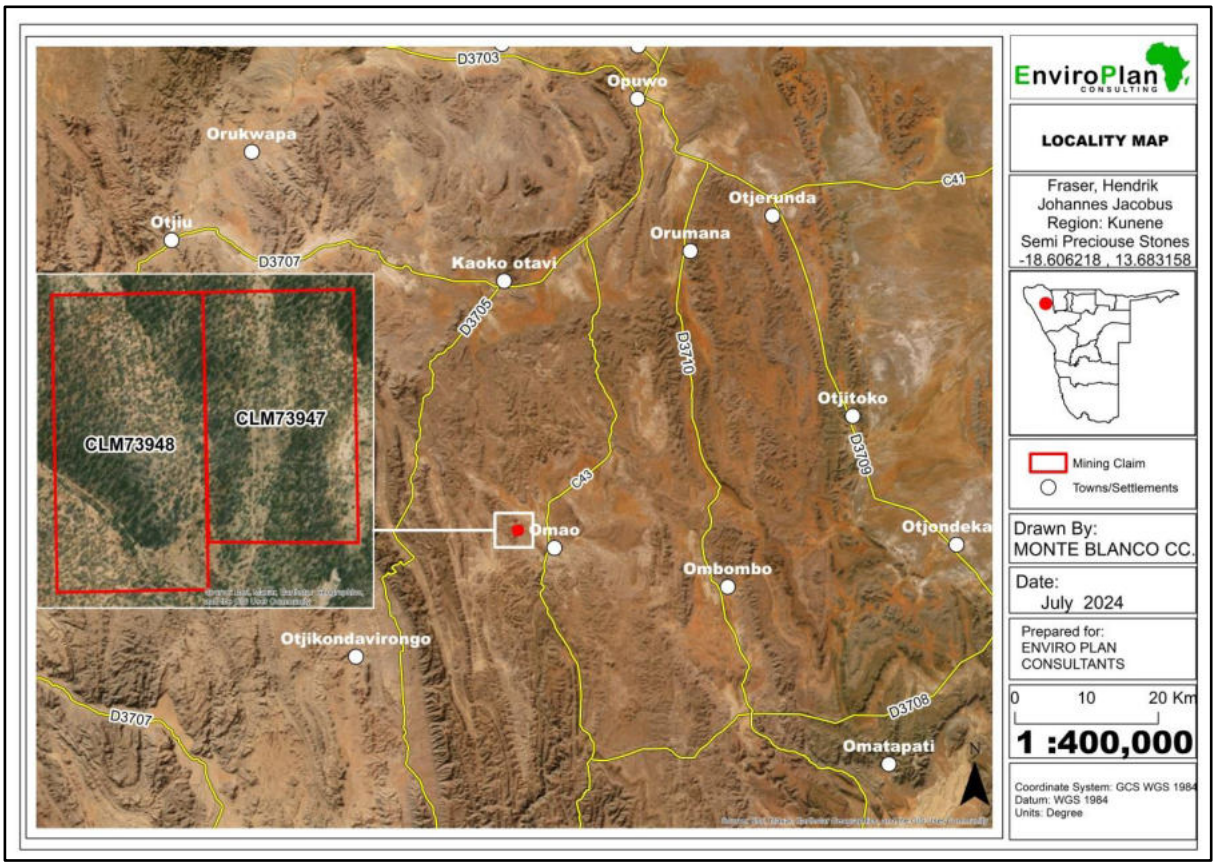


Figure 1: Mining claims locality

1.4. Need and Desirability of the project

Kunene region have abundant unexploited mineral commodities. This is a list of exploitable or exploited mineral commodities recorded from this region namely *Barite (Barytes), Bismuth, Chromium, Coal, Cobalt, Coltan (Columbite-Tantalite), Copper, Diamond, Dimension Stone, Dolostone, Feldspar, Fluorite (Fluorspar), Gemstones, Gold, Iron, Lead, Limestone, Manganese,*

Nickel, Palladium, Platinum, Salt, Silica, Silver, Tantalum, Tin, Titanium, Tungsten, Uranium, Vanadium, Wollastonite and Zinc.

Namibia's economic model continues to be influenced by the exploitation of mineral resources. According to the National Planning Commission Report (2021), the average contribution of the mining sector to GDP between 1990 and 2018 is significant and favourably stand at 11.1 %. Mining remains the largest earner of Namibia's foreign exchange at about 45%. Mineral prospecting is enshrined in National Development Plan (NDP V), Vision 2030. The Harambee Prosperity Plan II plan (Pillar 2) place emphasis on economic advancement with view to enhance the productivity of priority sectors such as mining. The project inherently promotes economic socio- advancement through employment creation. The 2018 Labour Force Survey 2018 indicates that mining employs 1.7% of the total employed persons (NSA, 2019). Mining activities is thus encouraged so that the sector can contribute more to the Namibian economy (NPC, 2021.

According to Kunene Regional council, "Opuwo rural constituency is one of the most remote constituencies in the region established after Opuwo Constituency was divided into two constituencies (Opuwo Urban and Opuwo Rural), this constituency sits on 25, 758 square kilometres of land and has a population of 14 850. Economic activity in this area is centred on communal livestock farming and conservancies".

Potential Investment Areas

It has the potential of becoming the mining hub of the Kunene region through the setting up or establishing a copper processing plant at Otuani. Other potential areas are tourist facilities, butchery and tannery factory, etc.

1.5. Scope of Work

This study was carried out in accordance with the Environmental Management Act (EMA) (7 of 2007) and its 2012 EIA Regulations (GG No. 4878 GN No. 30). After submitting an application for ECC to the DEA, the first stage in the EA process is to submit a scoping report. This report provides the following:

Table 3: Sections within the scoping report

Description	Section of the Report
The need and desirability of the proposed project	Sub-Chapter 1.4
Project description	Sub- Chapter 1.6
Alternatives considered for the proposed project in terms of no- go option, design, and natural resources	Sub- Chapter 1.7
The relevant laws and guidelines pertaining to the proposed project	Chapter 2
Baseline environment in which the proposed activity will be undertaken	Chapter 3

The public consultation process followed (as described in Regulation 7 of the EMA Act) whereby interested and affected parties (I&APs) and relevant authorities are identified, informed of the proposed activity and provided with a reasonable opportunity to give their concerns and opinions on the project	Chapter 4
The identification of potential impacts, impacts description, assessment, mitigation measures and recommendations	Chapter 5
Recommendations and conclusions to the report	Chapter 6

1.6. Project Description

Proposed mining activities comprise various phases. For this EIA, the phase-based activities were categorized to enable impact assessment and analysis. The different project sections are as follows: **Exploration, Development, Production,** and **Care & Maintenance.** Exploration is the first stage of the project lifecycle and was done yielding evidence-based results of viable mineral deposits within the mining claims under study. The total footprint area of the proposed mining and quarrying project is about 33.1418ha and practically, the overall purpose of this assessment is to assess the probability of environmental disturbance and sensitivity of the surrounding area to the proposed targeted sites, to determine the potential impacts on such resources, and to avoid and/or minimize such impacts by means of management and/or mitigation measures.

1.6.1. Project preperation and Development Phase

Operating conditions will guide the working relationship between the Conservancy representatives, and the mining team. The mining team will undertake initial site visits to identify appropriate sites for the establishment of field camps. The field camps are for the safe keep of mining equipment and vehicles before use. No employees will be housed in the MCs. Site preparation activities will begin once surface drainage and ground water conditions are understood. Mining will only commence after ecological sensitive areas are known and agreed jointly with the conservancy.

Land clearing: Small land parcels will be cleared for the establishment of base or field camps and staging areas. Proponent shall ensure that areas identified are those that present minimal disturbance to the natural environment and wildlife.

Creation of access routes and haul tracks: Apart from the existing roads network leading to target areas, additional tracks may be created. Additional roadways may be considered for the purposes of accessing target sites. Where deemed necessary, graveling, and compaction of vehicle track's surfaces may be considered to allow for less track maintenance and seam less flow of traffic. No roads of bitumen standard exist in the area. No permanent structures will be built for mining works.

Fencing: Where deemed feasible, fences will be erected around field camps and target areas. Fencing will serve to keep out livestock from target sites.

1.6.2. Production or Operational Phase

The phase typifies an advance level of mining. While there are various mining methods, the most common is surface mining. The proposed mining activities will commence with open pits on targeted areas. According to Ramani 2012, Surface mining methods dominate the world production of minerals. Currently, almost all non-metallic minerals [more than 95%], most metallic minerals [more than 90%] and a large fraction of coal [more than 60%] are mined by surface methods. Of the over 30 billion tonnes of ore and waste materials that are mined each year, surface mining accounts for nearly 25 billion tonnes. The subsurface of the earth is the only source for fossil energy and mineral products, and mining is the only way to get at them".

Open pit: Open-pit is one of the most common mining methods used and starts from the earth's surface, maintaining exposure to the surface throughout the extraction period. The excavation usually has stepped sides to ensure the safety of the miners and a wide ramp where equipment can travel, allowing the product to be removed efficiently from the site of obtaining large blocks or slabs of natural stone from quarries through methods predating modern machinery and technology. These methods have been historically employed by ancient civilizations and traditional stone workers across different regions. The operations of drilling, blasting, loading and hauling will be used and they are common to most methods.

Benefits of open-pit mining include:

- Ease-of-use for mass production
- Small shut-down expense
- Ability to mine selectively for certain grades of ore
- Comparatively small crew size
- Elimination of safety hazards that can accompany complex underground mining operations
- Easy drainage of subsurface water
- No machinery restrictions - even heavy and bulky machinery can be utilized
- Lower capital and operating costs

Figure 2: Illustration of open pits dug during exploration on the MCs under study

Figure 3: Evidence of trenching on targeted sites

Figure 4: Evidence of targeted site, heavily disturbed

Site Rehabilitation: Dug out trenches will be back filled with waste rock (gangue). Stockpiled top soil will be returned to the backfilled areas. Sites will also be re-vegetated and returned to a pre-exploration state. Rehabilitation will be done concurrently with mining activities (ore removal etc.).

Water requirements*:* Water will be sourced from existing boreholes. About 80,000 litres (80 m^3) per day would be required. This amount of water is aimed at suppressing dust around tipping areas and vehicle tracks. Approximately 400 *liters* of domestic water will be needed per day.

Waste management: Waste material generated will be in the form of rock material (non-mineral) and derived from trenching activities. Insignificant amounts of domestic waste will be generated by the mining team. Domestic or general waste will be transported out of the MCs area on a daily basis

and disposed at a nearest approved land fill site. There are no licenced waste disposal sites in the project area.

Efluent Management: During mining, sufficient portable chemical toilets will be provided for workers and appropriately emptied according to their manufacturer's operational standards and legislated occupational sanitary provisions. Licenced waste contractors will provide sewage removal services.

Mining equipment, Materials and Services:

Construction equipment will be sourced from contractors proximate to the project site. Were deemed essential, equipment will need to be sourced from elsewhere in the country and/or abroad as per the required and approved operating standards.

Labour sourcing: Temporary or contract employment opportunities will be created during the duration of mining activities. Non-skilled labour force will be sourced locally.

Housing*:* Personnel will be accommodated at an identified mining camp area. Before use of a camp, an environmental risk assessment will be conducted and submitted together with the biannual report of the mining activities.

1.6.3. Care and Maintainance/ Decommissioning phase

This phase will involve the removal of equipment and dismantling of facilities and safe mining closure. All trenches will be backfilled. The mining timeframe/ period will be determined by the viability of the existing mineral deposits within the claims. The surface affected by mining will be rehabilitated and re-vegetated in accordance with applicable standards. Decommissioning will be done following a detailed study which will guide decommissioning activities to be compliant to the EMA Act of 2007 and its guidelines and regulations.

After mining finishes, the mine area must undergo rehabilitation to minimize environmental damage. This step in the mining process is critical to ensuring the sustainability of the land for future use.

First, waste dumps are contoured to flatten them out and stabilize them. If the ore contains sulphides, it is covered with a layer of clay to prevent rain and oxygen from oxidizing the sulphides into sulphuric acid, which is also known as acid mine drainage.

Then, the waste dump is covered with soil, vegetation is planted, and the area is fenced to prevent livestock from eating the newly planted vegetation. This layer will eventually erode but in the meantime, it will allow the leaching of heavy metals to occur slowly enough for the surrounding environment to absorb them. The open pit is also fenced off to prevent access, and over time fills up with groundwater unless the groundwater levels are excessively deep.

1.6.4. Environmentally sensitive areas identified

The proposed mining activities are in a sensitive and protected area that is Ombujokanguindi conservancy and village with memorial sites (Himba cemetery) A Specialist Heritage and Archaeological impact Assessment was commissioned for the project area and here attached as Appendix C.

1.7. Project alternatives considered

Alternatives are defined as: "different means of meeting the general purpose and requirements of the activity" (Environmental Management Act (2007) of Namibia and its regulations (2012)). This section will highlight the different ways in which the project can be undertaken and identify the alternative that will be the most practical but least damaging to the environment.

1.7.1. No-Go Alternative

The "No-Go" alternative is the option of not proceeding with the activity, which typically implies a continuation of the status quo. This would mean that the mining activities will not be done, and potential mining opportunities will be lost. The local economy will not be improved rather there are illegal small-scale miners currently extracting copper ore within the mining claims.

In considering the proposed project, the 'no-go' option cannot be the preferred alternative.

Figure 5: Evidence of current illegal small-scale mining ongoing on the mining claims under study

1.7.2. Resources alternatives

In terms of the resources that may be required for the proposed mining activities, their alternatives are presented in Table 4 overleaf.

Table 4: Alternatives considered in terms of services infrastructure

Services	Proposed source	Alternative source
Water	Water to be sourced from existing boreholes.	Piping water from other sources out of the project area. This would be done to supplement local water supplies
Power	Electric energies and generators	Solar
Power for cooking	Gas stoves	Solar
Worker's accommodation	Campsite at the project site	Accommodation in the nearest town, which is Opuwo (depending on commuting and accessibility)
Mining technology	Open pit mining was on targeted points within the mining Claims	Underground mining will be considered as an alternative that is if the mineral deposits prove to be abundant on deeper layers
Waste Management		
Sewage	Portable toilets – these are easily transportable and have no direct impact on the environment or ecology (if waste is properly disposed of)	Ventilated improved pit (VIP) latrine.
Domestic waste	Onsite waste bins, regularly emptied at the nearest landfill (Opuwo landfill site)	Driving waste daily to the nearest town landfill (Opuwo municipality landfill site)
Hazardous waste (chemicals)	Waste generated is to be transported to and disposed of at an appropriate facility in the nearest town (Opuwo) equipped for the disposal of hazardous waste	None

1.7.3. Conclusions on the Considered Alternatives

The alternatives considered for the project are summarized as follows:

- No-go visa vies continuation of the proposed project: The no-go alternative is not considered to be the preferred option. Should the proposed project be discontinued, none of the potential impacts (positive and negative) identified would occur. Therefore, the underlying mineral deposits will remain untapped.

- Project design: The proposed mining methodology will be informed by this ESIA study to ensure minimal impacts on the receiving environment.

- Resources:
    - Water-Water for the proposed activity is to be sourced from boreholes.
    - Energy- Increased use of solar technologies is promoted within the development. Where it cannot be successfully employed the use of generators would be required.
    - Waste - Domestic and hazardous waste is to be disposed of appropriately. Portable toilets are to be made available at the construction site and the mining camp and these are easily transportable and have no direct impact on the environment or area ecology (if waste is properly disposed of).

2. CHAPTER TWO: POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

2.1. Introduction

To ensure that the proposed mining activities comply with the legal requirements for good practice and preservation of the environment, a review of applicable Namibian and International legislation, policies and guidelines have been consulted. This review serves to inform the project Proponent, Interested and Affected Parties and the decision makers at the DEA of the requirements and expectations, as laid out in terms of these instruments.

The project triggers the following Namibian legal instruments.

- *The Constitution of the Republic of Namibia (1990).*
- *Environmental Assessment Policy of Namibia 1994.*
- *Environmental Management Act No. 07 of 2007.*
- *EIA Regulations GN 57/2007 (GG 3812).*
- *The Water Act 54 of 1956.*
- *The Water Resources Management Act No. 11 of 2013.*
- *Pollution Control and Waste Management Bill.*
- *Atmospheric Pollution Prevention Ordinance 11 of 1976.*
- *National Solid Waste Management Strategy.*
- *Soil Conservation Act 76 of 1969.*
- *Road Traffic and Transport Act, No. 22 of 1999.*
- *Forest Act 12 of 2001.*
- *Mineral Policy of Namibia*
- *National Policy on Climate Change for Namibia (2011).*
- *National Climate Change Strategy & Action Plan 2013 – 2020.*
- *Nature Conservation Ordinance (1996).*
- *National Biodiversity Strategy and Action Plan (NBSAP2) 2013 – 2022.*
- *Labor Act 11 of 2007.*
- *Health and Safety Regulations GN 156/1997 (GG 1617).*
- *Public Health Act 36 of 1919.*
- *Public and Environmental Health Act 1 of 2015; and*
- *National Heritage Act 27 of 2004.*

These above-listed legislations and policies and their inclusion in the proposed project assessment are further presented in Table 5 overleaf

Table 5: Polices, legal and administrative regulations

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
The Constitution of the Republic of Namibia (1990)	The articles 91(c) and 95 (i) commits the state to actively promote and sustain environmental welfare of the nation by formulating and institutionalising policies to accomplish the sustainable objectives which include: *Guarding against over utilization of biological natural resources,* *Limiting over-exploitation of non-renewable resources,* *Ensuring ecosystem functionality,* *Maintain biological diversity.*	Mining activities can interfere with ecological processes. Attention should be given to the state of water resources and biodiversity.
Environmental Assessment Policy of Namibia 1994	The Environmental Assessment Policy of Namibia states Schedule 1: Screening list of policies/ plans/ programmes/ projects subject to environment must be accompanied by environmental assessments. “The development activities" are on that list.	The activity triggers an environmental impact assessment prior to commencement.
	The policy provides a definition to the term “Environment” broadly interpreted to include biophysical, social, economic, cultural, historical, and political components and provides reference to the inclusion of alternatives in all projects, policies, programmes, and plans.	The proposed development requires the assessment of all possible environmental and social impacts to avoid, minimise or compensate environmental damage associated with the activities.

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
Environmental Management Act No. 07 of 2007	Requires that activities with significant environmental impact are subject to an environmental assessment process (Section 27). Requires for adequate public participation during the environmental assessment process stakeholders to give their opinions about a project (Section 2(b-c)). According to Section 5(4) a person may not discard waste as defined in Section 5(1)(b) in any way other than at a disposal site declared by the Section 3 (2) (b) states that "community involvement in natural resources management and the sharing of benefits arising from the use of the resources, must be promoted and facilitated" is key. Section 3 (2) (e) states that "assessments must be undertaken for activities which may have a significant effect on the environment or the use of natural resources".	The nature of the proposed mining and interrelated activities has potential to cause adverse environmental impacts to the surrounding environment. Activities such as trenching can cause significant environmental impacts. Therefore, proper assessments should guide project planning The EIA study considered full stakeholder participation. Stakeholder consultation was fully conducted. The proposed development is involving the utilisation of natural resources (water and land). Therefore, benefits from the implementation of the project must be shared equally. Environmental cost relating to project shall not be borne by communities found in the project area and surroundings. Project shall not commence without an environmental clearance certificate
EIA Regulations GN 57/2007 (GG 3812)	Details requirements for public consultation within a given environmental assessment process (GN No 30 S21). Details the requirements for what should be included in an Environmental Scoping Report (GN No 30 S8) and an EIA report (GN No 30 S15).	The implementation of the project triggers the need for consultation of all affected and interested stakeholders regarding the development at all project development phases from planning to operation of the facility. A stakeholder and I&APs consultation meeting were held in respect to this, and all the concerns and issues were noted and addressed in this report.
The Water Act 54 of 1956	The Act was formulated to consolidate and amend the laws relating to the control, conservation and	The activities directly affecting water conservation, management and use therefore, requires the implementation of water

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
	use of water for domestic, agricultural, urban, and industrial purposes; to make provision for the control, in certain respects, of the use of sea water for certain purposes; for the control of certain activities on or in water in certain areas.	conservation measures.
Minerals (Prospecting and Mining) Act, 1992 (Act no. 33 of 1992)	Act provides the licensing procedures, the rights of holders, the administration, and the ownership of minerals. In addition, the Act requires mining companies to provide detailed studies on the potential impact of the operations to the surrounding environment, how to mitigate them and rehabilitations plans	Prospecting or mining operations shall not commence except in accordance with license granted. Renewals of MCs are accommodated twice for two-year periods, with the area decreasing by 25 per cent with each renewal
Pollution Control and Waste Management Bill	The bill aims to "prevent and regulate the discharge of pollutants to the air, water and land" Of particular reference to the Project is: Section 21 "(1) Subject to sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse." Section 55 "(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment."	The proposed activity triggers Section 21 and 22 of the bill. Activities such as trenching transportation, primary crushing may require the robust adoption of in-situ pollution mitigation measures. Contractors of the civil works of the project should make it mandatory that they manage their waste in a manner that do not cause environmental harm and risk both to the surroundings and the local communities.

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
Atmospheric Pollution Prevention Ordinance 11 of 1976	The law provides for the prevention of atmospheric pollution and for matters incidental thereto. The law regulates and prohibit pollution from industries particularly smoke and dust. The ordinance considers air pollution from point sources but does not address air quality standards,	Mining activities will most likely affect ambient air quality. Efforts to suppress and monitor dust should be adopted as recommended in the ESMP.
National Solid Waste Management Strategy	The Strategy ensures that the future directions, regulations, funding, and action plans to improve solid waste management are properly co-ordinated and consistent with national policy, and to facilitate co-operation between stakeholders. Waste disposal presents a challenge to solid waste management in Namibia. The top priority is to reduce risks to the environment and public health from current waste disposal sites and illegal dumping in many areas of Namibia.	Mining activities can potentially generate significant amount of waste material that need careful management. The obligation to meet waste management objectives should be borne by both proponent and contractors. The proponent should limit the exposure of waste to the natural environment and surrounding. In-situ waste management plans should be adopted and implemented prior the commencement of operations. Rock waste and other non-mineral waste should be stored and disposed in an environmentally friendly manner. Waste should be carted away to licences waste disposal sites.
Soil Conservation Act 76 of 1969	The Act established to consolidate and amend the law relating to the combating and prevention of soil erosion, the conservation, improvement, and manner of use of the soil and vegetation and the protection of the water sources in the Republic of Namibia.	The construction of auxiliary infrastructure such as access roads or tracks to mining targets should include systems and mechanism for preventing erosion.

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
Road Traffic and Transport Act, No. 22 of 1999	The Act provides for the establishment of the Transportation Commission of Namibia; for the control of traffic on public roads, the licensing of drivers, the registration and licensing of vehicles, the control and regulation of road transport across Namibia's borders; and for matters incidental thereto.	Mitigation measures should be provided for if the roads and traffic impacts cannot be avoided. Should the proponent wish to undertake activities involving road transportation or creation new access adjoining national roads, relevant permits will be required from the Ministry of Works and Transport
Forest Act 12 of 2001	Section 10 (1) set out the aim of the forest management as to: The purpose for which forest resources are managed and developed, including the planting of trees where necessary in Namibia is to conserve soil and water resources, maintain biological diversity and to use forest produce in a way which is compatible with the forest's primary role as the protector and enhancer of the natural environment.	The proposed project will likely result in the disturbance of indigenous vegetation of conservation significance including the disruption of biological processes.
	(b) Any living tree, bush or shrub growing within 100 metres of a river, stream, or watercourse.	The project will not result in the removal of living trees, bushes and shrubs growing within 100m of a river, stream, or watercourse.
	(2) A person who wishes to obtain a licence to cut and remove the vegetation referred to in subsection (1) shall, in the prescribed form and manner, apply for the licence to a licensing officer who has been designated or appointed for the area where the protected area is situated.	The removal of trees in the above instances would require the contractors or sub-contractors to acquire necessary forestry permits first.

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
National Policy on Climate Change for Namibia (2011)	The National Policy on Climate Change pursues constitutional obligations of the Government of the Republic of Namibia, namely for "the state to promote the welfare of its people and protection of Namibia's environment for both present and future generation."	Measure should be adopted by NHIG to prevent or minimise toxic emissions into the atmosphere. Dust suppression and monitoring will be employed, to ensure those air quality objectives tied to climate change mitigation are met.
National Climate Change Strategy & Action Plan 2013 – 2020	The Strategy outlines Namibia's response to climate change. The strategy aims to address and plan for action against climate change, both through mitigation and adaptation actions. In its adaptation strategy, the Strategy recognises the role of a sustainable water resource base.	The development should adopt measures that strengthen sustainable utilization of water resource. The implementation should be very careful on not to cause harm to the available water resources but improve the management through various conservation technics.
	The Strategy proposed strategies that aim to: Strategic Aim 1: Further improve the overall climate change understanding and related policy responses in water resources sector. Strategic Aim 2: Monitoring and data collecting technologies of surface and underground water are developed and implemented at basin/watershed level.	The proponent should invest capital on strengthening climate change and adaptation through cleaner production systems implementation. Certification by international standards such as ISO14001 can help with climate sustainability, and is recommended.
Nature Conservation Ordinance (1996)	This ordinance relates to the conservation of nature; the establishment of game, parks, and nature reserves; the control of problem animals; and highlights matters incidental thereto.	The activities of the project are highly localized. The likelihood of project activities interference with any protected parks and nature reserves objectives is non-existent. However, there is need for proper designing and planning of the drainage and water network of the project to make sure that any service infrastructure is not in conflict with the provisions listed in the Nature Conservation Ordinance.

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
		All species of birds are protected except the game birds mentioned in *Schedule 6* which can be hunted.
National Biodiversity Strategy and Action Plan (NBSAP2) 2013 – 2022	The action plan was operationalized in a bid to make aware the critical importance of biodiversity conservation in Namibia, putting together management of matters to do with ecosystems protection, biosafety, and biosystematics protection on both terrestrial and aquatic systems.	The proposed project during construction and operation phases potentially triggers ecosystem threats from pollution. As such mechanisms for environmental compliance and monitoring will be put in place, ultimately aimed at protecting biodiversity.
Labour Act 11 of 2007.	Empowers the minister responsible for labour to publish regulations pertaining to health and safety of labourers (S135). Details requirements regarding minimum wage and working conditions (S39-47).	Proposed mining activities invite significant amount of laborious work. Therefore, there is need to ensure that proponent ensures employees a working environment that is safe, and adequate facilities provided for the upkeep of employee welfare standards. The Ministry of Labour and Safety demands that a health management policy will be drafted and instituted.
Health and Safety Regulations GN 156/1997 (GG 1617)	Details various requirements regarding health and safety requirements.	-Occupational health and safety provisions during construction and operational phases should be clearly outlined. -Compliance monitoring and responsibilities for compliance monitoring should be clearly stated
Public Health Act 36 of 1919	Section 119 states that “no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”	Compliance to the Public Health Act will be ensured in relation to the following: - Sanitation facilities -Communicable diseases -Emergency healthcare provision

LEGISLATION/POLICY	PROVISION/SUMMARY	PROJECT APPLICABILITY
Public and Environmental Health Act 1 of 2015.	To provide a framework for a structured uniform public and environmental health system in Namibia; and to provide for incidental matters.	- COVID 19 workplace measures
National Heritage Act 27 of 2004	Section 48(1) states that "A person may apply to the (Heritage) Council for a permit to carry out works or activities in relation to a protected place or protected object" Protects and conserves cultural heritage and cultural resources with special emphasis on places and sources of National heritage including graves, artefacts, and any objects older than 50 years.	The project impacts are localized and there are prehistoric Himba graves in the same village with the MCs but not the proximity to the MCs. However, if heritage resources (e.g., human remains etc.) discovered during implementation, guidelines dictate that a permit be acquired from the National Heritage Council of Namibia for relocation of any artefacts or specimen. - Heritage study was commissioned
SANS 1929: 2005	Dust particulates from excavations /ore crushing that are smaller than 1mm are deemed dangerous to both plants and humans. As such a dust monitoring following the ASTM D1739 method should be used for monitoring dust emissions from any crushing plant anticipated. Dust chemical analysis and fallout quantities are specified for industrial and residential environs.	A dust fallout monitoring plan can be instituted around project area

3. CHAPTER THREE: ENVIRONMENTAL AND SOCIAL BASELINE

3.1. Introduction

In this chapter, the findings of the EIA team on baseline surveys, public consultation and desktop reviews undertaken are in respect to the ecology, society, economy and geo-political set up of the proposed project area. The geological structure and meteorology of the project site will also be discussed in this chapter to give an in-depth understanding of the project area in question. The mining claims are located in Opuwo Rural an electoral constituency in the Kunene Region of Namibia. The administrative centre of Opuwo Rural is the settlement of Otuani. Opuwo Rural was created in August 2013, following a recommendation of the *Fourth Delimitation Commission of Namibia*, and in preparation of the 2014 general election. The old Opuwo Constituency was split into Opuwo Urban and Opuwo Rural.

3.2. Socio-economic profile

One of the most remote constituencies in the region established after Opuwo Constituency was divided into two constituencies(Opuwo Urban and Opuwo Rural), this constituency sits on 25, 758 square kilometres of land and has a population of 14 850. Economic activity in this area is centred on communal livestock farming and conservancies. It has the potential of becoming the mining hub of the Kunene region through the setting up or establishing a copper processing plant at Otuani. Other potential areas are tourist facilities, butchery and tannery factory, etc.

In the entire region there are OvaHerero, OvaHimba and OvaZemba speaking tribes. The semi-nomadic lifestyle of the OvaHimba and OvaZemba has impeded the educational progress of these communities in numerous ways. These communities are cattle herders in constant search of quality grazing for their cattle, goats and sheep. And to ensure that their livestock is secure from environmental dangers, every member of the community must avail themselves to perform these critical tasks of herding and protecting cattle. Informant Two (August 2015) emphasized this point by the asserting that "*Children of school going age are not excluded from the responsibility of looking after and caring for the livestock*". This results in many of the OvaHimba and OvaZemba children not completing a full year of attendance at school and subsequently failing academically on numerous occasions. In Opuwo ancient traditions and modern times meet, as Opuwo is the Center of the Himba culture. The Himba are independent people and are the last nomads of Namibia. The Himba are the forefathers of the modern Herero and entered northern Namibia during the 15th / 16th century from Angola.

The Kunene Region is also associated with the so-called Kaokoveld (or Kaokoland). The Kaokoveld is a huge, dry region (50,000 km²) in the north-east of Namibia. No agricultural activities take place here and an abundance of wildlife can be found. The town of Opuwo is the only bigger town to be

found in the Kunene region and is an ideal stop over when travelling north to the Epupa Falls of the Kunene River.

Employment opportunities in the Kunene region are very scarce. Not only are the OvaHimba and OvaZemba living in small communities, they are also isolated from other communities. The industrial, tourism and agricultural sectors are still underdeveloped in the Kunene region which results in limited employment opportunities. Even paid domestic work is almost non-existent since each family takes responsibility for its own domestic work. Due to the scarcity of employment, job seekers in Opuwo town often settle for any job offered because there is almost no prospect of getting another or better job offers. The general under-development of the region contributed to unfavourable conditions that result in a number of challenges. Poor transport networks presented challenges in communication and the coordination of education activities. Due to poor infrastructural development the region experienced a high staff turnover and this affected the quality service delivery.

3.2.1. Land Use

The proposed mining activities will be developed in Otuani village. The site(s) identified are within the central part of Otuani village identified as a communal land. The current land use is characterized by livestock production (such as goats, donkeys and ostriches), integrated wildlife conservation (spotted in the village were antelopes, duiker, mountain zebras and other small mammals), small scale mining, and horticultural activities. Outani village is within Ombujokanguindi conservancy and people are living in harmony with wildlife.

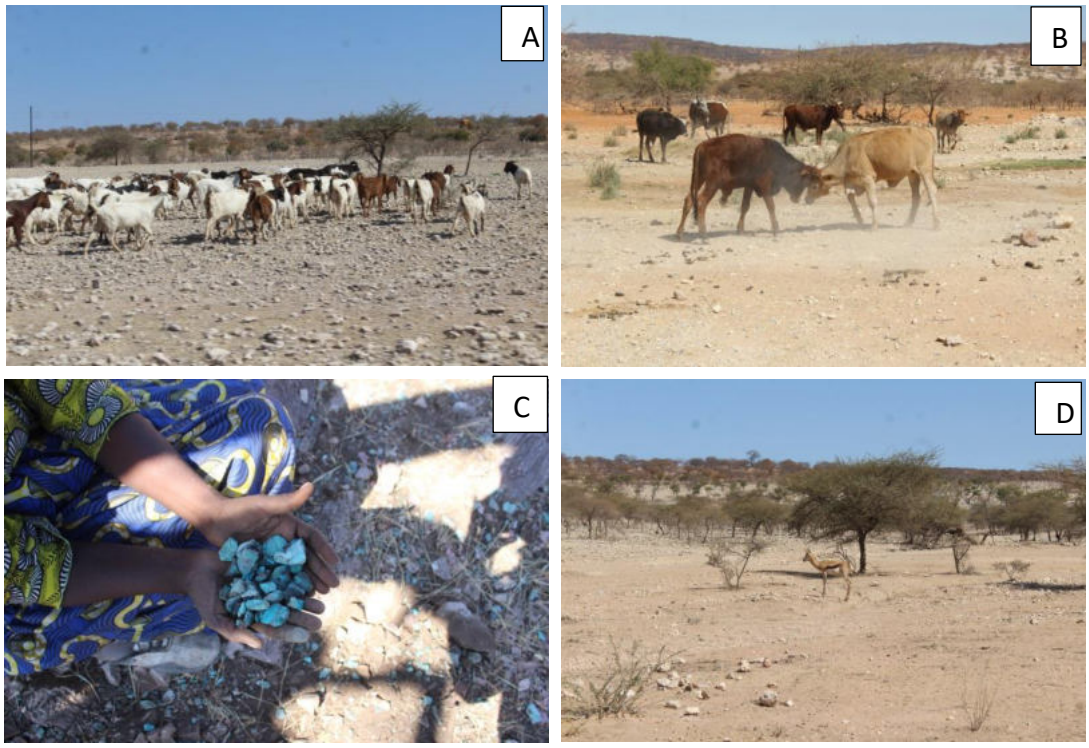


Figure 6: (A-D) Goats, cattle, women in mining and an antelope spotted in Otuani village

3.3. Climate

Opuwo has a Mid-latitude desert climate (Classification: BWk). The district's yearly temperature is 28.01ºC (82.42ºF) and it is 3.55% higher than Namibia's averages. Opuwo typically receives about 57.05 millimetres (2.25 inches) of precipitation and has 90.26 rainy days (24.73% of the time) annually.

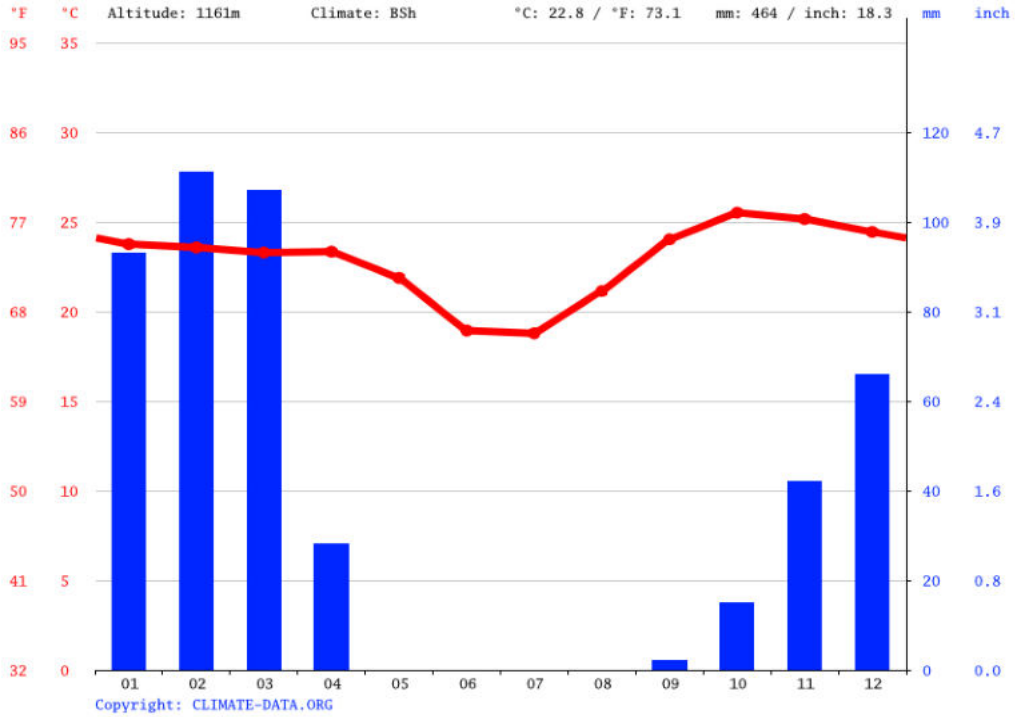


Figure 7: Opuwo climate graph// weather by month

3.3.1. Precipitation

Over the past decade, pastoralists in Kunene Region, Namibia, have endured recurrent drought and flood events that have culminated in the loss of their primary form of livelihood–pastoralism. Most pastoralists are finding it difficult to sustain their livelihoods, and their communities have fallen into extreme poverty.

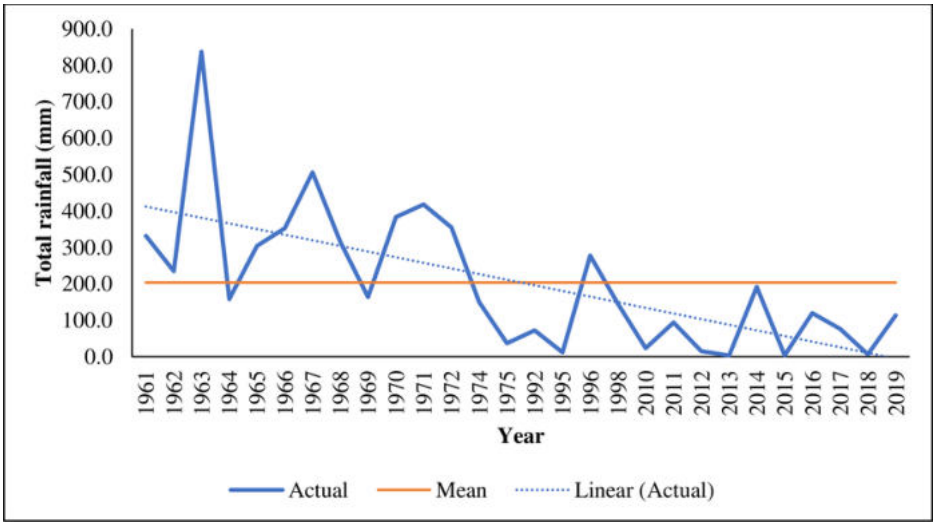


Figure 8: Total annual rainfall at Opuwo town, Kunene Region from 1961-2019

Rainfall data was accessed by the corresponding author from the Namibia Meteorological Service data records in Windhoek on 25 February 2020. No rainfall data are available for the years 1976–1994 and 1999–2009.

3.3.2. Temperature

The month of highest temperature is October during which the average temperature reaches up to 25.5 °C | 77.9 °F. At 18.8 °C | 65.8 °F on average, July is the coldest month of the year.

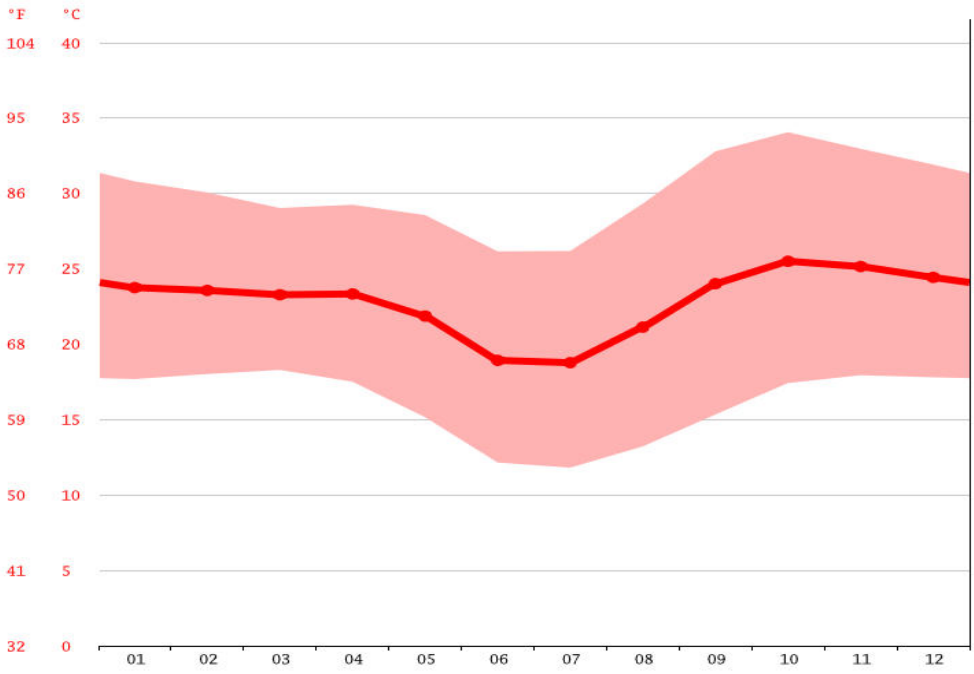


Figure 9: Average temperature by month- Opuwo

3.4. Fauna

The Kunene Region, particularly the area known as Kaokoland in northern Namibia, is home to a diverse array of mammals and reptiles. This remote, arid landscape features rugged terrain, mountains, savannahs, and desert environments, providing habitats for a variety of species adapted to the harsh, dry conditions. Abundant are Springbok, ostrich and herds of long-horned cattle graze in harmony on vast plains, which descend northward to the oasis of the Kunene River. Since the establishment of conservancies, wildlife numbers in communal areas have rebounded from historic lows prior to independence. Springbok, gemsbok and ostrich are common in Marienfluss. Other mammals include giraffe, mountain zebra, kudu, klipspringer, duiker, steenbok and the diminutive dik-dik. Cheetah, leopard, spotted and brown hyena, and jackal all prowl the vastness. The Kunene supports a large crocodile population, as well as the Cape clawless otter. . *For a detailed survey please refer to appendix B of this report. (Fauna and Flora study).*

Figure 10: An antelope was spotted as well as mammal droppings evidence of other mammals in existence around the mining claims under study.

3.5. Flora

Opuwo and the entire Kunene region are situated in a semi-arid area and have little vegetation. The proposed site supports eight (24) acacia type of trees, thin shrubs and no grasses. The vegetation in and around the project area is highly adapted to the harsh, arid environment, where water is scarce and temperatures can be extreme. This region spans a range of ecosystems, from the hyper-arid coastal deserts of the Skeleton Coast to the semi-arid savannahs and rugged mountains inland.

The most prominent vegetation consists of drought-resistant species, including hardy grasses, thorny shrubs, and small trees such as acacias, Mopani, and Commiphora, which have deep roots to tap into underground water sources. In the rocky mountainous areas, specialized plants like euphorbias and succulents, including aloe species, thrive in the challenging terrain.

The Kaokoveld sub-region is particularly noted for its unique and endemic species, including the Welwitschia mirabilis, an ancient desert plant capable of surviving with minimal water for hundreds of years.

Overall, the grass and plant species around project area showcase nature's ability to thrive in challenging environments and contribute to the unique and diverse ecosystem of the Kunene Region. *For a detailed survey please refer to appendix B of this report. (Fauna and Flora study).*

Figure 11: Abundant average sized Mopani shrubs were identified within the mining claim's general area

3.5.1. Habitat categorization

There mining claims will have direct impact Otuani village. A total of two plant-based habitats were identified for plant identification. The habitat types in the mining claims area were:

1. Rocky hillside with partially weathered surface rocks and very shallow soils.

2. Open plains with deeper soil and scattered bushes and shrubs. The plains are interrupted with rocky outcrops of varying sizes. It relatively consists of the least vegetation or least species richness.

The proposed activities will impact the following:

a) Rocky hills

- Displacement of Wildlife: Mining operations often require extensive clearing of land, which can result in the loss of vegetation and destruction of critical habitats for wildlife, including desert-adapted species like the Hartmann's Mountain zebra, and several birds and reptile species. The unique flora and fauna of the region have adapted to the harsh, arid conditions, and any disturbance to their habitats can lead to population declines or even local extinctions.
- Fragmentation of Habitats: Mining infrastructure, such as roads and mining pits, can fragment landscapes, preventing the free movement of animals. This fragmentation can

isolate populations of species, reducing genetic diversity and making them more vulnerable to disease and environmental changes.

Each of these habitats has its own distinctive food, shelter and refuge characteristics, but each with similar faunal characteristics. Compared to rocky hillsides, open plains are more widespread and more homogeneous. Therefore, avoidable disturbance in any of the area should be minimized, since them all support taxa of high priority especially Rocky hills.

A detailed Flora and Fauna study is also attached as Appendix (B) of the ESR.

Figure 12: General appearance of the rocky hill as an identified habitat

3.5.2. Birds

The project area is home to a remarkable diversity of bird species, many of which are specially adapted to thrive in the arid, rugged environment. This remote area in northern Namibia includes deserts, mountains, savannahs, and ephemeral river systems, providing unique habitats that support both endemic and migratory birds.

In Otuani village they have existence of ostriches which were spotted during our site visits. The world's largest bird is of paramount importance both on tourism and domestic.

Figure 13: Ostriches were spotted in Otuani village

3.6. The General Geology, Surface and Ground Water

3.6.1. Local Geology

According to the report published by Department of Water Affairs, Division Geohydrology Groundwater in Namibia, Granitic and gneissic rock types cover vast areas in the Kaokoveld. Granites, gneiss and old volcanic rocks are roughly located in a triangle between Marienfluss, Swartbooisdrif and Sesfontein. Metamorphic rocks including marble and quarzitic bands occur in the western part of the Kaokoveld. They form a strip between the Hartmann's Mountains and the coast that goes all the way down to the Uniab River. Mountain ranges of carbonate rock types (dolomites and limestones of the Otavi Group) that can be related to the Otavi Mountain Land form the eastern edge of the area, grading towards the north into outcrops of quartzitic sandstone representing the Nosib Group. The Baynes Mountains in the far north are also dolomitic and quartzitic rocks of the Otavi and Nosib groups. Volcanic rocks of the Etendeka Formation crop out between Sesfontein and the Huab River. Some smaller units are present in the area south of Orupembe. These volcanic rocks build the typical table mountain landscape of Damaraland. Underlying shale and mudstone of the Dwyka Formation are present in the area west and east of Orupembe, in the Opuwo area, west of Sesfontein and at Ruacana.The most recent rocks are calcretes (in the area of Khorixas, Fransfontein and Sesfontein) as well as alluvial deposits occurring locally in the ephemeral river beds.

As far as tectonic structures are concerned, the most well-known ones are the Sesfontein Thrust and the Purros Lineament. The Sesfontein Thrust represents the contact between the Otavi Dolomites and metamorphosed rocks, represented by phyllites of the Mulden Group. This contact zone gave rise to the springs found at Sesfontein. The Purros Lineament has been investigated hydro geologically but is not productive, despite some good yielding boreholes drilled on the lineament.

Figure 14: Partially weathered glacial Diamictite is of the Otavi group of rock identification

Within and around the mining claims area there is partially weathered ggeologically, the geology of the area is characterized by rocks of the Otavi Group (Mendelson et al, 2002). The site is characterized by dolomite, limestone, shale and quartzite rocks with very huge trees around which can be an evidence of underground water aquifers.

3.6.2. Water Sources

Hydrology

Department of Water Affairs, Division Geohydrology Groundwater in Namibia revealed that the region generally has a low groundwater potential. The area with aquifer potential, more or less reflects the rainfall distribution, decreasing westwards. Knowledge of the aquifers in this area is sparse, due to the low number of boreholes and few government investigations on groundwater. The area is well known for its numerous springs that provide water for wildlife and villagers. Small-scale irrigation schemes are in operation at some of the higher yielding springs, like Warmquelle, Kaoko-Otavi and Sesfontein. There are also a number of thermal springs in the area, e.g. Warmquelle, Ongongo, Monte Carlo and springs at Okangwati. Other well-known springs are Fransfontein, Gainatseb, Palmwag, Sarusas and Orupembe. The Sarusas spring, located in the lower reaches of the Khumib River, provides drinking water to wildlife in the Skeleton Coast Park.

Strategic Water Resources Assessment report by the Ministry of Agriculture water and rural development postulates that in the northwest of Opuwo reasonable yields were obtained from boreholes in a calcrete-floored valley filled with over 150m of Karoo sediments. Groundwater quality in northern Kunene is generally good but with slightly elevated SO, concentrations, particularly in Karoo sandstones, shales and dolomites, compared with Damara Sequence sediments (DWA, 1986).

3.6.3. Water Vulnerability

The proposed project is likely to have no major negative impacts on the water resources. The local area does not seem to have economic water resources. Therefore, the development of the proposed project is likely to have no negative impacts on water resources. The combined effects of unsaturated and saturated flow probabilities were used as indicator for groundwater vulnerability. However, groundwater or surface water will only be vulnerable to contamination if the following three (3) component are all present at the same time and at a site-specific area within project area:

(i) Contaminant sources resulting from proposed construction program;

(ii) Potential pathways for contaminant migration such as major high order discontinuities (ephemeral river channels, valleys and gullies;

(iii) Targets (economic water resources) present within the project area. Overall, the limited local groundwater resources found in the area form part of the poorly developed metamorphic rocks based confined and unconfined aquifer system that is moderately vulnerable to any sources of pollution

Small sandy riverbeds were identified the project area; however, these are ephemeral which means that they are normally dry on surface but occasionally flow immediately after heavy rainfall

events. During designing and construction flood protection measures will be implemented.

According to figure 16 overleaf (geo hydrology, aquifer map) shows uniformity of the geohydrology of the study area. The consultant team recommends that project designing should promote surface runoff and keep away from waterways and hilly portions.

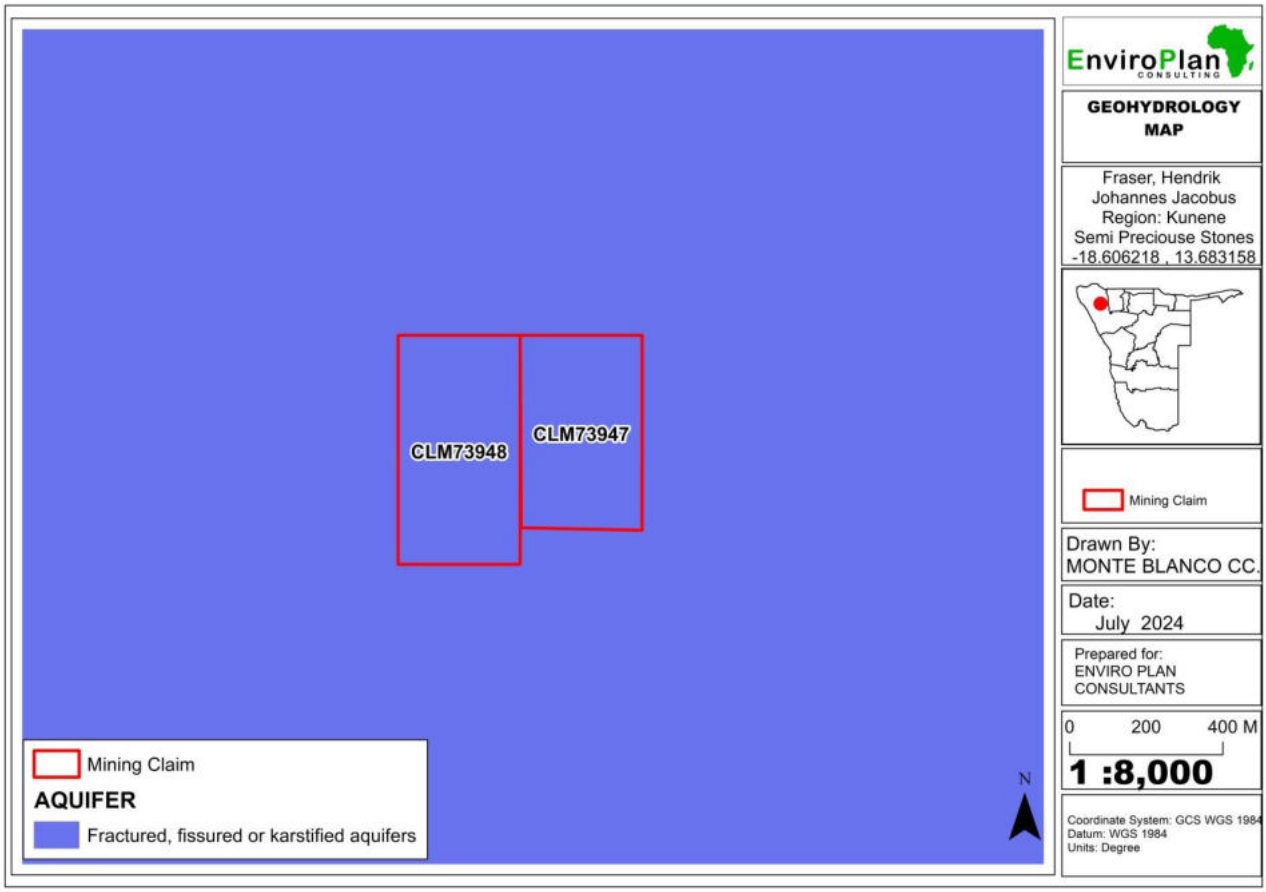


Figure 15: Geo Hydrology map

3.7. Topography

The proposed mining claims topographically, the entire area where the mining claims 73947 & 73948 situated especially the targeted sites are on top of the mountains, rocky surfaces and rugged terrains. These targeted sites for this proposed project have already been dug or mined before probably by the small local miners and the exploration team.

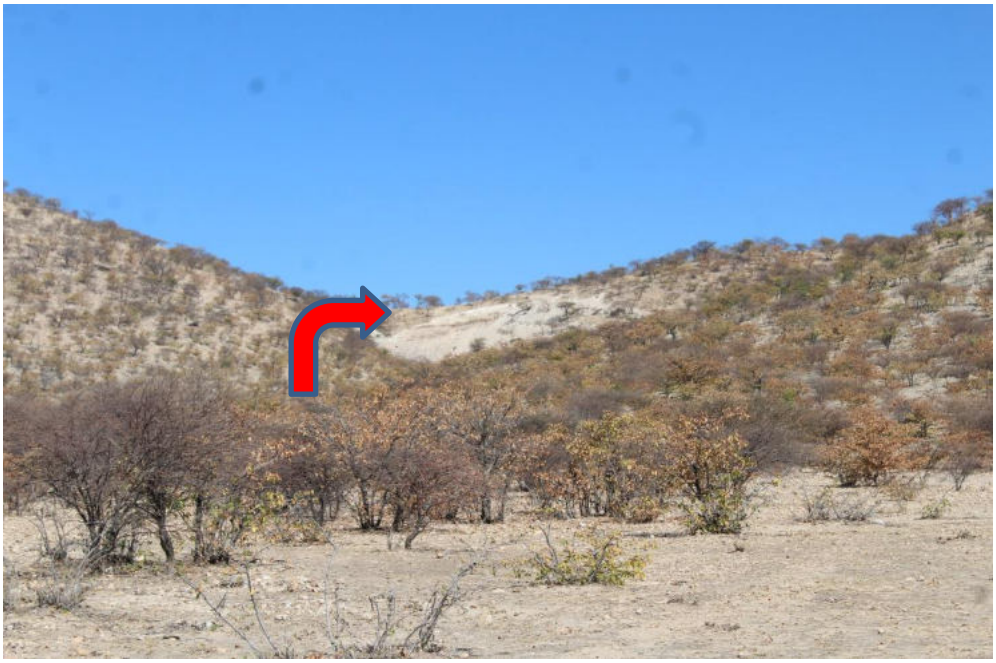


Figure 16: The targeted mining area from a distance view point

4. CHAPTER FOUR: PUBLIC CONSULTATION

4.1. Overview

Public and Stakeholder involvement is a key component of the EA process. The public consultation process, as set out in Section 21 of Regulation No 30 of EMA, has been followed during this assessment and the details thereof are documented below.

Public consultation forms an important component of an Environmental Assessment (EA) process. Public consultation provides potential Interested and Affected Parties (I&APs) with an opportunity to comment on and raise any issues relevant to the project for consideration as part of the assessment process. Public consultation has been done in accordance with both the EMA and its EIA Regulations.

The public consultation process assists the Environmental Assessment Practitioner (EAP) in identifying all potential impacts and the extent to which further investigations are required. Public consultation can also aid in the process of identifying possible mitigation measures.

4.2. Approach

4.2.1. Interested and Affected Parties (I&APs)

An I&P is defined under the Environmental Management Act (2007) as:

- "Any person, group of persons or organization interested in or affected by an activity; and
- (b) Any organ of state that may have jurisdiction over any aspect of the activity".

EnviroPlan identified specific I&APs, whom were considered interested in and/or affected by the proposed activities through the following means:

- Notification letters and/or emails were sent to those possibly interested and affected by the proposed project; and
- Notices were placed in the local newspapers requesting any potentially affected or interested members of the public to register as I&APs.
- A meeting with the I &A Ps was scheduled to be held on the 27th of July 2024 on the proposed site but no one attended because of a funeral in the village. The EIA team opted to have focused group discussions with the small-scale miners around the mining claims. A second meeting was carried on the 3rd of October 2024. Concerns received through emails and via WhatsApp were addressed in the ESMP making part of the report.

A summary of the I&APs identified is presented in Table 6 below. The complete list of I&APs is provided in Appendix D.

Table 6: Summary of Identified IAPs

	Description
List of IAPs	Ministry of Environment, Forestry and Tourism Ministry of Mines and energy
	Identified relevant stakeholders i.e Ombujokanguindi Conservancy committee, traditional leadership, Rural constituency officials.
	Otuani villagers

4.2.2. Communication with I&APs

Regulation 21 of the EIA Regulations details steps to be taken during a given public consultation process and these have been used in guiding this process. Communication with I&APs regarding the proposed development was facilitated through the following means and in this order:

Table 7: Consultative engagement conducted

Date	Activity	Intended audience
27 July 2024 3rd October 2024	Questionnaire administration and public meeting	Otuani villagers
05th September 2024	Background Information administration to identified Stakeholders	Opuwo rural constituency office, Ombujokanguindi conservancy committee members and Otuani village traditional leadership.
July and August 2024	Newpaper adverts, site notices, Emails and WhatsApp	I & A Ps, Relevant stakeholders and Otuani villagers

- A Background Information Document (BID) containing descriptive information about the proposed activities was compiled (Appendix D) and sent out to all identified and registered I&APs; via emails and physical distribution.
- Site notices were fixed at the constituency notice board *(please refer to Appendix D);*

Figure 17: Plates A-D showing focus group discussions done with different people of Otuani villagers at different intervals to discuss about the proposed mining activities.

Public consultation was carried out according to the Environmental Management Act's EIA Regulations. After the initial notification, the I&APs were given three weeks to submit their comments on the project. The comment period will remain open until the final scoping report is submitted to MET. Met will also launch its commenting process through online EIA portal which allows everyone who is affected or interested about the proposed activities to contribute before the final decision is reached.

4.3. Printed Media

4.3.1. Background Information Document

A Background Information Document (BID) was drafted at the onset of the EA process to act as a useful information handout about the proposed road upgrade project. In addition, the BID provided details on the public consultation process with contact details for further information. This document was advertised for availability through various means of newspaper articles, public meeting and electronic mail; please refer to Appendix D of this report.

4.3.2. Newspaper Advertisements & Articles

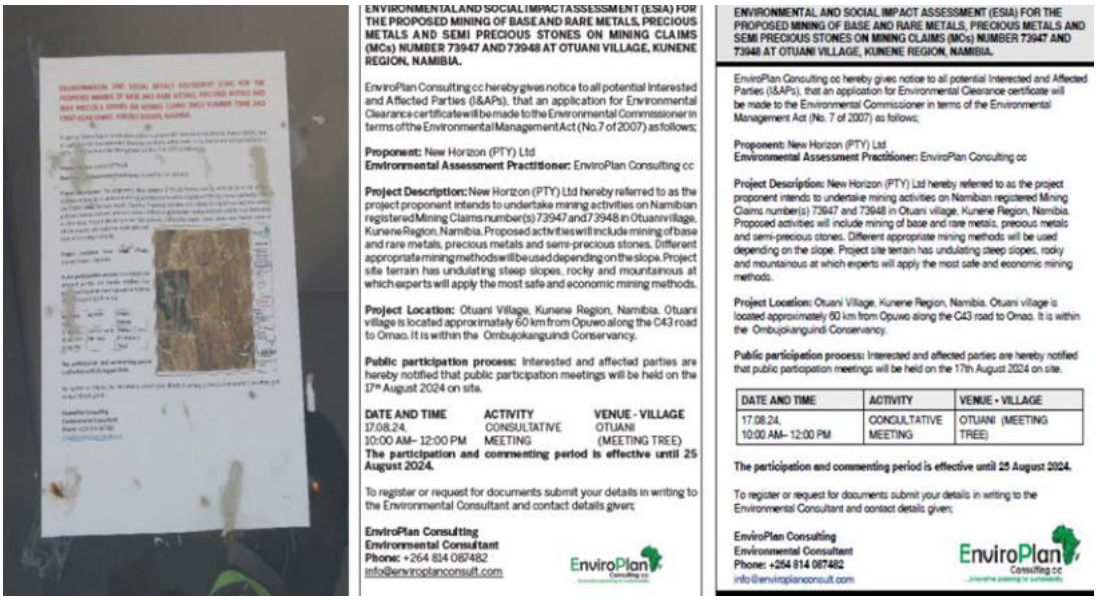
Newspaper notices about the proposed project and related EA processes was circulated in two newspapers for two weeks. Notices were placed in The Windhoek Observer and New Era newspapers, briefly explaining the activity and its locality, and inviting members of the public to register as I&APs (Appendix D).

Table 8: Newspaper and Site Notices (Appendix D)

Newspaper	Area of Distribution	Language	Date placed
New Era (Refer to Appendix D)	Country Wide	English	2 August 2024 9 August 2024
Windhoek Observer (Refer to Appendix D)	Country Wide	English	31 July 2024 07 August 2024
Site notices	Rural constituency Office Shops On-Site	English and Otjiherero	27 July 2024

4.3.3. Building a Stakeholder Database

A stakeholder database for the project collected through a variety of means. During the advertisement of the project (though public notices in local newspapers and site-notices) the list was augmented as Interested & Affected Parties (I&AP) registered and contact information of stakeholders updated, please refer to Appendix D.



ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) FOR THE PROPOSED MINING OF BASE AND RARE METALS, PRECIOUS METALS AND SEMI PRECIOUS STONES ON MINING CLAIMS (MCs) NUMBER 73947 AND 73948 AT OTUANI VILLAGE, KUNENE REGION, NAMIBIA.

EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) as follows;

Proponent: New Horizon (PTY) Ltd
Environmental Assessment Practitioner: EnviroPlan Consulting cc

Project Description: New Horizon (PTY) Ltd hereby referred to as the project proponent intends to undertake mining activities on Namibian registered Mining Claims number(s) 73947 and 73948 in Otuani village, Kunene Region, Namibia. Proposed activities will include mining of base and rare metals, precious metals and semi-precious stones. Different appropriate mining methods will be used depending on the slope. Project site terrain has undulating steep slopes, rocky and mountainous at which experts will apply the most safe and economic mining methods.

Project Location: Otuani Village, Kunene Region, Namibia. Otuani village is located approximately 60 km from Opuwo along the C43 road to Omao. It is within the Ombujokanguindi Conservancy.

Public participation process: Interested and affected parties are hereby notified that public participation meetings will be held on the 17th August 2024 on site.

DATE AND TIME	ACTIVITY	VENUE - VILLAGE
17.08.24, 10:00 AM- 12:00 PM	CONSULTATIVE MEETING	OTUANI (MEETING TREE)

The participation and commenting period is effective until 25 August 2024.

To register or request for documents submit your details in writing to the Environmental Consultant and contact details given;

EnviroPlan Consulting
Environmental Consultant
Phone: +264 814 087482
info@enviroplanconsult.com

EnviroPlan Consulting cc

Figure 18: Public notification poster at Opuwo Rural constituency offices notice board

4.3.4. Comments and review period

Stakeholders have registered and provided comments from the onset of the public consultation process and the initial information sharing through the BID, newspaper and site notices.

The public commenting period from the onset of the EIA process and the Scoping Report and Environmental Management Plan was made available to the public and stakeholders for comment and review. MET will let the reports available on their website.

Attendance registers, comments and proof of stakeholder's engagement are attached in appendix D of this ESR. Key Issues raised during the consultative meeting are presented below:

4.4. Conclusion

EnviroPlan concludes that the public participation was extensive and transparent enough to ensure any comments or issues regarding the proposed development were addressed and to suggest possible mitigation measures. All Identified affected parties were purposively approached and their concerns were taken into considerations.

Issues/ concerns raised

- The support to the project's activities is a dream come true by the regional council's intensions/ support towards economic growth, "**Potential Investment Areas,** *it has the potential of becoming the mining hub of the Kunene region through the setting up or establishing a copper processing plant at Otuani. Other potential areas are tourist facilities, butchery and tannery factory, etc*.", as highlighted on the Regional Council's website.
- The residents and stakeholders raised concerns to meet and greet with the project proponent in person for them to cordialize the working relationships. A second meeting was organized and was successfully held on the 3rd of October 2024.
- Employment and development opportunities from the mining activities should directly benefit Otuani villagers and Opuwo Rural constituency at large.
- Conservancy committee raised concerns over conservative issues with the mining activities, therefore promised to work cordially with the mining team

5. CHAPTER FIVE: ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS

5.1. Overview

The proposed activities have impacts on certain biophysical and social features. The identified impacts were assessed in terms of probability (likelihood of occurring), scale/extent (spatial scale), magnitude (severity) and duration (temporal scale) as presented in this chapter. To enable a scientific approach to the determination of the environmental significance, a numerical value is linked to each rating scale. This methodology ensures uniformity and that potential impacts can be addressed in a standard manner so that a wide range of impacts are comparable.

It is assumed that an assessment of the significance of a potential impact is a good indicator of the risk associated with such an impact. The following process will be applied to each potential impact:

- Provision of a brief explanation of the impact;
- Assessment of the pre- and post-mitigation significance of the impact; and
- Description of recommended mitigation measures.

The recommended mitigation measures prescribed for each of the potential impacts contribute towards the attainment of environmentally sustainable operational conditions of the project for various features of the biophysical and social environment.
The following criteria were applied in this impact assessment:

5.1.1. Extent (spatial scale)

Extent is an indication of the physical and spatial scale of the impact. Table 9 shows rating of impact in terms of the extent of spatial scale.

Table 9: Extent or spatial impact rating

Low (1)	Low/Medium (2)	Medium (3)	Medium/High (4)	High (5)
Impact is localised within the site boundary: Site only	Impact is beyond the site boundary: Local	Impacts felt within adjacent biophysical and social environments: Regional	Impact widespread far beyond site boundary: Regional	Impact extend National or over international boundaries

5.1.2. Duration

Duration refers to the timeframe over which the impact is expected to occur, measured in relation to the lifetime of the project. Table 10 shows the rating of impact in terms of duration.

Table 10: Duration of Impact

Low (1)	Low/Medium (2)	Medium (3)	Medium/High (4)	High (5)
Immediate mitigating measures, immediate progress	Impact is quickly reversible, short-term impacts (0-5 years)	Reversible over time; medium term (5-15 years)	Impact is long-term	Long term; beyond closure; permanent; irreplaceable or irretrievable commitment of resources

5.1.3. Intensity, magnitude / severity

Intensity refers to the degree or magnitude to which the impact alters the functioning of an element of the environment. The magnitude of alteration can either be positive or negative. These were also taken into consideration during the assessment of severity. **Table 11** shows the rating of impact in terms of intensity, magnitude or severity.

Table 11: Intensity, magnitude and severity of impact

Type of Criteria	Negative				
	H- (10)	M/H (8)	M- (6)	M/L (4)	L- (2)
Qualitative	Very high deterioration, high quantity of deaths, injury of illness / total loss of habitat, total alteration of ecological processes, extinction of rare species	Substantial deterioration, death, illness or injury, loss of habitat / diversity or resource, severe alteration or disturbance of important processes	Moderate deterioration, discomfort, partial loss of habitat / biodiversity or resource, moderate alteration	Low deterioration, slight noticeable alteration in habitat and biodiversity. Little loss in species numbers	Minor deterioration, nuisance or irritation, minor change in species / habitat / diversity or resource, no or very little quality deterioration.

5.1.4. Probability of occurrence

Probability describes the likelihood of the impacts actually occurring. This determination is based on previous experience with similar projects and/or professional judgment. See Table 12 for impact rating in terms of probability of occurrence.

Table 11: Probability of occurrence impact rating

Low (1)	Low/Medium (2)	Medium (3)	Medium/High (4)	High (5)
Improbable; low likelihood; seldom. No known risk or vulnerability to natural or induced hazards.	Likely to occur from time to time. Low risk or vulnerability to natural or induced hazards	Possible, distinct possibility, frequent. Low to medium risk or vulnerability to natural or induced hazards.	Probable if mitigating measures are not implemented. Medium risk of vulnerability to natural or induced hazards.	Definite (regardless of preventative measures), highly likely, continuous. High risk or vulnerability to natural or induced hazards.

Significance

Impact significance is determined through a synthesis of the above impact characteristics. The significance of the impact "without mitigation" is the main determinant of the nature and degree of mitigation required. As stated in the introduction to this chapter, for this assessment, the significance of the impact pre-and post-mitigation actions was measured.

Once the above factors (Table 9, Table 10, Table 11, Table 12 and 13) have been ranked for each potential impact, the impact significance of each is assessed using the following formula:

SP = (magnitude + duration + scale) x probability

The maximum value per potential impact is 100 significance points (SP). Potential impacts were rated as high, moderate or low significance, based on the following significance rating scale (Table 12, overleaf).

Table 12: Significance rating scale

SIGNIFICANCE	*ENVIRONMENTAL SIGNIFICANCE POINTS*	*COLOUR CODE*
High (positive)	>60	H
Medium (positive)	30 to 60	M
Low (positive)	<30	L
Neutral	0	N
Low (negative)	>-30	L
Medium (negative)	-30 to -60	M
High (negative)	>-60	H

For an impact with a significance rating of high (negative), mitigation measures are recommended to reduce the impact to a low or medium significance rating, provided that the impact with a medium significance rating can be sufficiently controlled with the recommended mitigation measures. To maintain a low or medium significance rating, monitoring is recommended for a period of time to enable the confirmation of the significance of the impact as low or medium and under control.

The impact assessment for the proposed activities is given below.

5.2. Mining activities Impact Assessment

The mining phase is mostly concerned with the preparation of the site for access roads, drilling sites and camping sites. The potential impacts during this phase include loss of biodiversity, dust and noise during site clearing and preparation. Mining activities will be done using applicable mining methods but not limited to open cast mining, quarrying and diamond cutting. Previously during exploration activities small scale miners as well as the exploration team has been working on targeted sites which proved to yield some base metals for example copper ore. This has been causing a random quarrying around the mining claim as shown on figure 19 overleaf.

Figure 19: Random quarrying as a result of exploration and small-scale mining on the mining claims under study

5.3. Impact Assessment on Biodiversity Loss

A number of indigenous trees are located along the mountain and riverine areas. Some vegetation may need to be removed for accessibility. This may also lead to habitat destruction for some fauna. As such, care should be taken during the removal of vegetation for site preparation to ensure minimal disturbance in the area. The envisaged impact at the project site is thus not of such magnitude and/ or significance that it will have irreversible impacts on the biodiversity and endemism of the area and Namibia at large. The pre- mitigation impact is assessed to be "medium" in significance and after mitigation the impact is assessed to have a "low" significance. The assessment of this impact is presented in Table 13.

Table 13: Assessment of the impacts on biodiversity loss

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M - 3	L/M – 5	M – 6	M – 3	M – 42
Post-mitigation	L – 1	L- 1	L- 2	L – 1	L-4

5.3.1. Mitigations and recommendations to biodiversity loss

- Large indigenous trees on site need to be identified, marked, surveyed and are not to be removed or damaged.
- Trees with a trunk size of 150 mm and bigger should be surveyed, marked with paint (readily visible) and protected.

- Protected tree species as per the Forest Act No 12 of 2001 and Forest Regulations of 2015 may not be removed without a permit from the Ministry of Agriculture, Water and Forestry.
- Workers should be trained on the importance of conserving trees during construction activities and should be sensitised to be vigilant against any practice that will have a harmful effect on vegetation.

5.4. Impact Assessment on Dust Generation

Site clearing and drilling activities may lead to the generation of dust which could impact the local communities and businesses negatively, if not properly handled. This may pose a negative health impact on the surrounding communities and nearby vegetation. Dust is commonly impacting plants with wide leaves mostly their respiration process. Without any mitigation measures implemented, the impact can be rated as of a "medium" significance. After the implementation of the mitigations, the impact will be significantly reduced to "low" rating. The assessment of this impact is presented in Table 14.

Table 14: Assessment of the impacts of dust generation

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M – 3	L/M – 5	M – 6	M – 3	M – 27
Post-mitigation	L – 1	L- 1	L- 2	L – 1	L-4

5.4.1. Mitigations and recommendations to dust generation

- Dust suppression techniques should be implemented e.g. spraying of water on site or where heavy vehicles are moving to reduce dust levels to an acceptable standard.
- The local community and surrounding businesses should be continuously consulted to ensure that the dust levels are acceptable.
- Community members and businesses should be informed prior to any clearing of vegetation commencing so that they are aware of the planned work.
- During high wind conditions, the contractor must make the decision to cease works until the wind has settled.
- Stockpiles should be covered with plastic to reduce windblown dust.
- Workers should be provided with dust masks.

5.5. Impact Assessment on Environmental Degradation

During mining different types of waste may be generated on-site. This may include general waste as well as hazardous chemicals and hydrocarbons which may cause degradation of the subject environment if not correctly managed and contained. Furthermore, the presence of the workforce and machinery may enhance environmental destruction within the subject site. Without any mitigation measures implemented, the impact can be rated as of a "medium" significance. After the implementation of the mitigations, the impact will be significantly reduced to "low" rating. The assessment of this impact is presented in Table 15.

Table 15: Assessment of impacts on environmental degradation

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M - 1	L/M – 3	M – 4	M – 4	M – 32
Post-mitigation	L - 1	L- 1	L- 2	L – 1	L-4

5.5.1. Mitigations and recommendations to environmental degradation

- All types of waste should be effectively managed on site.
- Hazardous substances and hazardous waste materials should be carefully and correctly handled and stored on site according to guidelines in the ESMP.
- Contractors should be trained on the importance of protecting the environment.
- Contractors should be trained on ESMP compliance and sensitized to ensure that they respect and protect the environment during the work.

5.6. Impact Assessment of Waste Generation

Mining activities usually generate waste which may lead to environmental pollution, if not properly handled. This may result in blocked waterways should waste be blown into water ways; animals may choke on waste when ingested and additionally it may pose a negative visual impact on the surrounding environment. Without any mitigation measures implemented, the impact can be rated as of a "medium" significance. After the implementation of the mitigations, the impact will be significantly reduced to a "low" rating. The assessment of this impact is presented in Table 16.

Table 16: Assessment of impacts on waste generation

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M - 1	L/M – 3	M – 4	M – 4	M – 32

Post-mitigation	L - 1	L- 1	L- 2	L – 1	L-4

5.6.1. Mitigations and recommendation to waste generation

- The mining site should be kept tidy at all times.
- All domestic and general mining waste produced on a daily basis should be cleaned and contained.
- No waste may be buried or burned on site or anywhere else.
- Waste containers (bins) should be emptied during and after mining activities and the waste removed from site to the municipal waste disposal site on a covered vehicle (to prevent waste blowing off the vehicle into the environment).
- Separate waste containers (bins) for hazardous and domestic / general waste must be provided on site.
- Construction labourers should be sensitised to dispose of waste in a responsible manner and not to litter.
- No waste may remain on site after the completion of the project.
- The recycling of waste should be considered and implemented as far as possible.

5.7. Impact Assessment of Soil, Surface and Groundwater

Improper handling, storage and disposal of hydrocarbon products and hazardous materials at the site may lead to soil, surface and groundwater contamination, in case of spills and leakages. Without any mitigation measures implemented, the impact can be rated as of a “medium” significance. After the implementation of the mitigations, the impact will be significantly reduced to “low” rating. The assessment of this impact is presented in Table 17 overleaf.

Table 17: Assessment of the impacts on soil, surface and groundwater

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M – 3	L/M – 4	M – 6	M – 4	M - 52
Post-mitigation	L – 1	L- 1	L- 2	L – 1	L-4

5.7.1. Mitigations and recommendation to soil, surface and groundwater

- Careful storage and handling of hydrocarbons on site is essential.

- Workers responsible for the storage and handling of hydrocarbons should be suitably trained to do so and trained on spill prevention (e.g. the use of drip trays) and the handling of potential spills should they occur, to be able to ensure implementation on site.
- Potential contaminants such as hydrocarbons and wastewater should be contained on site and disposed of in accordance with municipal wastewater discharge standards so that they do not contaminate surrounding soils, surface water and eventually groundwater.
- An emergency plan should be available for major / minor spills at the site during operation activities (with consideration of air, groundwater, soil and surface water) and during the transportation of the product(s) to the site.

5.7.2. Mitigations and recommendations to dust generation

- Dust abatement techniques should be implemented e.g. spraying of water on site to reduce dust levels to an acceptable standard.
- The local community and surrounding businesses should be continuously consulted to ensure that the dust levels are acceptable.
- Community members and businesses should be informed prior to construction commencing so that they are aware of the planned construction.
- During high wind conditions the contractor must make the decision to cease works until the wind has settled.
- Stockpiles and sand being transported should be covered with plastic to reduce windblown dust.
- Workers should be provided with dust masks.

5.8. Impact Assessment of Noise Generation

5.8.1. Impact Assessment on noise generation

Heavy vehicles are most likely to increase the ambient noise. Caterpillars, JCBs, Tipper trucks, blasting activities can increase noise levels to the immediate environment. Noise can be a nuisance to the people, wildlife. Shy animals are believed to be surviving within the project site.

Mitigations and recommendations to noise generations

Site preparation activities should be limited to daytime hours (between 08h00 and 17h00) unless otherwise arranged with community members and businesses in the area. Shy animals should be given enough time to move away.

Mining activities and the presence of construction vehicles may lead to the generation of noise which could impact the local communities and animals negatively, if not properly handled. This may pose a disturbance on the surrounding communities. Without any mitigation measures implemented, the impact can be rated as of a “medium” significance. After the implementation of

the mitigations, the impact will be significantly reduced to "low" rating. The assessment of this impact is presented in Table 18 below.

Table 18: Assessment of the impacts of noise generation

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M – 2	L/M – 2	M - 6	M – 3	M - 27
Post-mitigation	L – 1	L- 1	L- 2	L – 1	L-4

5.8.2. Mitigations and recommendation to noise generation

- Construction activities should be limited to daytime hours (between 08h00 and 17h00) unless otherwise arranged with community members and businesses in the area.
- No amplified music should be allowed on site.
- Technology such as silencers should be installed on construction machinery.
- The use of horns as a general communication tool should not be allowed, they should only be used when necessary, as a safety measure.

5.9. Impact Assessment of Archaeological and Heritage Resources

According to the Archaeological and Heritage study undertaken, the proposed mining activities are not taking place in an area that has significant archaeological or heritage resources. However, should these be encountered during the upgrade activities, mitigation measures need to be in place to ensure that these resources are not harmed? Memorial sites were identified within the village like the Himba cemetery which is approximately 1.5 km away from the mining claims. Without any mitigation measures implemented, the impact can be rated as of a "medium" significance. After the implementation of the mitigations, the impact will be significantly reduced to "low" rating. The assessment of this impact is presented in Table 19 below.

Table 19: Assessment of the impacts on archaeological and heritage resources

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M - 1	L/M - 4	M - 6	M – 1	M - 11
Post-mitigation	L - 1	L- 1	L- 2	L - 1	L-4

5.9.1. Mitigations and recommendation to archaeological and heritage resources

- All works are to be immediately ceased in an affected area should an archaeological or heritage resource be discovered.

- The National Heritage Council of Namibia (NHCN) should advise with regards to the removal, packaging and transfer of the potential resource.

5.10. Impact Assessment of Temporary Employment Creation

The proposed activity may provide employment opportunities for the local people. Additional benefits may arise depending on the agreements reached between the community and the Proponent. The impact can be rated as of "low-positive" significance. The assessment of this impact is presented in Table 20.

Table 20: Assessment of impacts on temporary employment creation

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M + 2	L/M + 2	M + 2	M +3	L+ 18
Post-mitigation	L + 4	L+ 3	L+ 2	L + 3	L + 27

5.10.1. Recommendations for temporary employment creation

- Should any job opportunities result, they should be made available to the local people in the area as far as reasonably possible.
- Should materials or resources be sourced from communities, they should be sufficiently compensated in a manner agreed between the community and the proponent/contractor.

5.11. Impact Assessment of Health, Safety and Welfare

Proposed activities may cause health and safety risks to people operating on the site. Without any mitigation measures implemented, the impact can be rated as of a "medium" significance. After the implementation of the mitigations, the impact will be significantly reduced to "low" rating. The assessment of this impact is presented in Table 21 below.

Table 21: Assessment of impacts on health, safety and welfare

	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M – 2	L/M - 2	M – 6	M – 3	M - 27
Post-mitigation	L – 1	L- 1	L- 2	L - 1	L-4

5.11.1. Mitigations and recommendations to health and safety

- Employees should be provided with awareness training about the risks associated with the proposed upgrade work such as hydrocarbon handling and storage, the handling of heavy machinery etc.
- During the works conducted, workers should be properly equipped with personal protective equipment (PPE) such as coveralls, gloves, safety boots, safety glasses etc.
- The contractors should comply with the provisions with regards to health and safety as outlined in the Labour Act (No. 6 of 1992).

6. CHAPTER SIX: RECOMMENDATIONS AND CONCLUSION

6.1. Conclusion

The key potential biophysical impacts related to the mining and decommissioning phases of the proposed project were identified and assessed. Suitable mitigation measures (where required and possible) were recommended, and the impacts can be summarised as follows:

6.1.1. Impacts on biodiversity:

There are some large indigenous trees that may be affected, as such, no vegetation removal is recommended, unless a permit is issued by DEAF to ensure minimal disturbance in the area. The likelihood of this impact is low. However, the impact can be adequately addressed by the recommendations and management actions given in the EMP.

6.1.2. Impacts on environmental degradation:

Mining might result in degradation of the immediate environment. Furthermore, the presence of the workforce and machinery may aid in environmental destruction within the project site. Without any mitigation measures implemented, the impact can be rated as of a “medium” significance. After the implementation of the mitigations, the impact will be significantly reduced to low rating. The impact can be adequately addressed by the recommendation management actions given in the ESMP.

6.1.3. Impacts on waste generation:

Mining activities usually generate waste, which leads to environmental pollution, if not properly handled. This may result in blocked waterways should waste be blown into water ways; animals may choke on waste when ingested and it may pose a negative visual impact on the surrounding environment. Without any mitigation measures implemented, the impact can be rated as of a “medium” significance. After the implementation of the mitigations, the impact will be significantly reduced to low rating. The impact can be adequately addressed by the recommendations and management actions given in the EMP.

6.1.4. Impacts on soil, surface and groundwater contamination:

Improper handling, storage and disposal of hydrocarbon products and hazardous materials at the site may lead to spills and leakages which could cause soil, surface and groundwater contamination. The impact can be adequately addressed by the recommendations and management actions given in the ESMP.

6.1.5. Impacts on dust generation:

Site clearing, mining activities and the presence of construction vehicles may lead to the generation of dust which could impact the local communities negatively, if not properly handled. Without any mitigation measures implemented, the impact can be rated as of a “medium”

significance. After the implementation of the mitigation measures, the impact will be significantly reduced to low rating. The impact can be adequately addressed by the recommendations and management actions given in the ESMP.

6.1.6. Impact on noise generation :

Site clearing and mining will generate noise on site and existence of heavy vehicles may lead to the generation of noise which could impact the local communities negatively, if not properly handled. This may pose a disturbance on the surrounding communities. Without any mitigation measures implemented, the impact can be rated as of a “medium” significance. After the implementation of the mitigations, the impact will be significantly reduced to low rating. The impact can be adequately addressed by the recommendations and management actions given in the ESMP.

6.1.7. Impact on archaeological and heritage resources (during all phases):

The proposed activity is not taking place in an area that has significant archaeological or heritage resources. However, should these be encountered during the construction activities, mitigation measures need to be in place to ensure that these resources are not harmed. The impact can be adequately addressed by the recommendations and management actions given in the ESMP.

6.2. Recommendation

Based on the information provided in this report, EnviroPlan is confident the identified risks associated with the proposed project can be reduced to acceptable levels, should the measures recommended in the ESMP be implemented and monitored. It is therefore recommended that the project receive Environmental Clearance, provided that the ESMP *(Appendix A)* be implemented.

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8. APPENDICES

9. Appendix A: Environmental and Social Management Plan

10. Appendix B: Fauna and Flora study

11. Appendix C: Acheological and Heritage study

12. Appendix D: Public consultation evidence

13. Appendix E: Lead EAP Resume