ENVIRONMENTAL SCOPING AND MANAGEMENT PLAN

The Proposed Extraction of Sand and Construction Aggregate from the Seeis River, Farm Seeis No. 134/16 Khomas Region

JUNE 6

Compiled for: Theopaldt Properties Two cc P.O. Box 61176, Katutura, Windhoek, Namibia

Authored by: Mr. Shadrack Tjiramba



| DOCUMENT INFORMATION AND APPROVAL | | | | | | | |
|-------------------------------------|--|-----------------|--|--|--|--|--|
| Title | Environmental Scoping and Management Plan for the Proposed the Proposed Extraction of Sand and Construction Aggregate from the Seeis River | | | | | | |
| ECC Application Reference number | APP-003730 | | | | | | |
| Location | Farm Seeis No. 134/16 | o Khomas Region | | | | | |
| Proponent | Mr. Theopaldt Gurirab P.O. Box 61176, Katutura, Windhoek - Namibia | | | | | | |
| Author: | Signature | Date | | | | | |
| Mr. Shadrack Tjiramba (EAP) 1 | 02 May 2023 | | | | | | |
| Approval – Client 2 | V | | | | | | |
| Mr. Thoepaldt Gurirab | 03 May 28 2023 | | | | | | |
| Copy Right: | | | | | | | |

"This document is the intellectual property of ELC and may only be used for the intended purpose. Unauthorized use, duplication, plagiarism or copying without referencing is prohibited"



REPUBLIC OF NAMIBIA

MINISTRY OF AGRICULTURE, WATER AND LAND REFORM

 Telephone:
 (061) 2087228

 Fax:
 (061) 2087160

 Enquiries:
 R.Boois

 Email:
 James.Mouton@mawlr.gov.na

 Reference:
 PK 134/16

Government Office Park Private Bag 13184 WINDHOEK

Mr. Theopoldt Gurirab Managing Director Theopoldt Properties Two cc P.O. Box 61176 WINDHOEK

Dear Mr Gurirab

RE: REMOVAL OF ROCKS, SAND AND GRAVEL FROM THE WATER COURSE FOR SALE OR COMMERCIAL EXPLOITATION, SEEIS RIVER, FARM SEEIS NO. 134/16, WINDHOEK DISTRICT, KHOMAS REGION

- Kindly be informed that the Water Resources Management Act 11 of 2013 and Water Resources Management Regulations commenced on 29 August 2023.
- 2. Section 132 (6) of Act 11 of 2013 states that a person who, on the commencement of this Act, owns or uses or is in control of any dam, impoundment or borehole or carries on an activity which is required by this Act to be licensed, registered or authorized otherwise and in respect of which, before the commencement of this Act, a permit or other authorization was not required in terms of a repealed law, may continue to use or control such dam or borehole or to carry on such activity without the required licence, registration or authorization, but that person must, in accordance with this Act, apply to the Minister for the issue of the appropriate licence, registration certificate or other authorization under this Act, not later than 18 months after the date of commencement of this Act.
- Based on the above, you may continue with the present operations, but must apply for a licence for the removal of rocks, sand and gravel in terms of Section 101 of Act 11 of 2013 and Regulation 112 -123 of the Water Resources Management Act.
- This application must be submitted before the expiry of 18 months from the commencement date of 29 August 2023.

| Yours sincerely | EXECUTIVE DIRECTOR |
|---|--------------------|
| W | 2024 -01- 2 6 E |
| Ndiyakupi Nghituwami EXECUTIVE DIRECTO | ata (Ms) DR |

All official correspondence must be addressed to the Executive Director

executive summary

Project Overview

Theopaldt Properties Two cc (TPT-2) is a fully registered, 100% Namibian owned company. Their aim is to provide construction aggregate to the nation's infrastructure industry in particular for road construction. The TPT-2 business model is based on the supply of high quality sand and gravel to the civil construction, roads, mining, and agricultural sectors. TPT-2 owners have obtained a Sand Harvesting Permits form the relevant authority (MAWLR, see Appendices).

TPT-2 have determined through extensive market research that Windhoek is experiencing a shortage of sand for construction purposes, subsequently rendering some capital projects under review in terms of time completion agreements and in some instances projects are behind schedule with up to 4 months. In addition, TPT-2 has secured provisional contract to supply contractors of the Roads Authority with the needed sand and gravel for the construction of the Windhoek – Hosea Kutako International Airport B1 Road expansion project.

On completion of the initial installation of the onsite equipment and development of the associated infrastructure, TPT-2 anticipates to be producing and supplying up to 36,000 tons of high-grade sand monthly to the construction industry both in Windhoek to other projects within the Windhoek District.

Need for the Project

Currently 90% of sand provided for construction purposes in Windhoek comes from Usib River in Groot Aub and Swakop River in Okahandja areas. Since most of the rivers north of Windhoek have been depleted while others have been enclosed in developments, many business players in the sand and gravel sector are sourcing the raw material from a far. This results in a high cost of business and subsequently raising the cost aggregates material and making it unaffordable to the general consumers.

Overall, the extraction and processing activities is expected to generate full time medium to long term direct employment for at least 5-10 workers. The majority of workers to be employed on the proposed extraction and processing project are expected to be skilled and/or semi-skilled (general labourers and operators).

Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

Project Description

The main activity will be the mining of sand by utilizing Front-end loaders and bulldozers. The sand will then be loaded onto trucks and brought to a mobile screening unit where the product will be screened and separated according to size and quality and subsequently put through a washing process to remove other contaminants such as mica and other micro sediments.

The sand mining activity adopts the Dry-pit Channel approach which entail the excavated of shallow (less than 2 meter deep) sand pit within the active channel on dry intermittent or ephemeral streambeds. The suitable equipment for this type of mining is with conventional bulldozers, scrapers and loaders. Dry pits are often left with abrupt upstream margins, from which head cuts are likely to propagate upstream.

The sand will then be loaded onto trucks and brought to a mobile screening unit where the product will be screened and separated according to size and quality and subsequently put through a washing process to remove other contaminants such as mica and other micro sediments.

The bulk product will then be transported to the client for use in road building, civil construction and brick making activities. In short TPT-2 will be:

a) Mining

b) Screening

c) Washing

d) And transporting sand.

Need for an Environmental Impact Assessment

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socioeconomic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition for Theopaldt Properties to undertake its operation in compliance with the environmental legislative requirements in Namibia.

Therefore, Theopaldt Properties appointed Enviro-Leap Consulting cc to conduct an environmental assessment and facilitate the process of obtaining and Environmental Clearance Certificate.

Approach to the EIA Process

The assessment process consisted of a site visit to the project location and public consultation meetings with the Interested and Affected Parties (I&APs). An environmental scoping and management plan (EMP) were compiled and constitute the application for an Environmental Clearance Certificate submitted to the Ministry of Environment and Tourism (Office of Environmental Commissioner).

Overall Recommendation

Though the initial set up costs are high during the preconstruction and construction phases of the sand harvesting/mining infrastructure, it does offer direct and indirect employment opportunities and capacity building in the receiving community of Farms Seeis. However, minor negative impacts in the form of visual intrusion, dust and noise pollution especially during the preconstruction, construction, operation and rehabilitation phases will be experienced.

The following is a summary of the likely positive impacts that have been assessed for the different phases of the proposed sand mining project:

- i. Reduce the impacts and vulnerability of community to the effects of climate change (Likely impacts are low).
- ii. Raising awareness about the benefits of ecologically sustainable natural resource use (Likely impacts are high).
- iii. Socio-economic development and capacity building through mining and also agricultural skills transfer and training from the garden that will be set up (Likely impacts are high).

The following is a summary of the likely negative impacts that have been assessed for the different phases of the proposed sand mining project:

- i. Dust (Likely impacts are high but localized and can employ dust suppressing measures).
- ii. Land use (Likely impacts are negligible; the sand mining site is isolated from the distant farms).
- iii. Noise (Likely impacts are low as the site is far from residential areas).
- iv. Visual impact (Likely impacts are low for visual change as the sand mining infrastructure will be stationary on a localized portion of the river bank and obscured by natural riverine vegetation).
- v. Ecological and biodiversity loss (Likely impacts are localized and low).
- vi. Health and safety (Overall likely impacts are low with correct PPE).
- vii. Solid and hazardous waste management (Likely impacts are low with a solid waste management plan and minimal hydrocarbon fuel use).
- viii. Socioeconomic (Likely negative impacts are low)

Water pollution risk (Likely impacts are low with a wastewater mitigation regime as prescribed in the environmental management plan and no interference with the ground water table during any sand mining activity). Nonetheless, it can be concluded that positive impacts for the sand mining activities outweighs the negatives impacts identified during the process of EA. Most of the negative effects are not very high and they can be mitigated through detailed recommendations provided under their sections in the EMP.

It is hereby recommended that the proposed Theopaldt Properties Two cc sand mining project receives the blessings of the Ministry by issued with the Environmental Clearance Certificate for the development of the sand mining project. The Environmental Management Plan and the proposed mitigation measures must be adhered to as key responsibility of the proponent. Enviro-Leap Consulting cc will periodically and on appointment by the proponent, carry out environmental audits to assure adherence with the EMP.

glossary

| AfDB | African Development Bank |
|------|---|
| BID | Background Information Document |
| BoN | Bank of Namibia |
| CA | Competent Authority |
| DEAF | National Department of Environmental Affairs and Forestry |
| EA1 | Environmental Assessment |
| EA2 | Environmental Authorization |
| ECC | Environmental Clearance Certificate |
| EAP | Environmental Assessment Practitioner |
| EIA | Environmental Impact Assessment |
| EMA | Environmental Management Act |
| GPS | Geographical Positioning System |
| ММЕ | Ministry of Mines and Energy |
| MEFT | Ministry of Environment, Forestry and Tourism |
| IMF | International Monetary Fund |
| GPS | Geographical Positioning System |
| UN | United Nations |
| | |
| | |

contents

| Project Overviewiv |
|---|
| Need for the Projectiv |
| Project Descriptionv |
| Need for an Environmentalv |
| Impact Assessmentv |
| Approach to the EIA Processv |
| Overall Recommendation |
| 1. INTRODUCTION |
| 1.1. PROJECT APPLICANT AND PROJECT OVERVIEW1 |
| 1.2. PROJECT MOTIVATION (INCLUDING NEED AND DESIRABILITY)1 |
| 1.3. REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT ASSESSMENT |
| 1.4. EIA TEAM |
| 1.5. DETAILS AND EXPERTISE OF THE EAP |
| 1.6. OBJECTIVES OF THE ENVIRONMENTAL SCOPING ASSESSMENT |
| 2. PROJECT DESCRIPTION |
| 2.1. OVERVIEW OF THE PROPOSED EXTRACTION AND PROCESSING ACTIVITIES |
| 2.2. PROJECT RATIONALE (MOTIVATION, NEED AND DESIRABILITY) Error! Bookmark not defined. |
| 2.3. PROJECT LOCATION |
| 2.4. SUPPORTING INFRASTRUCTURE |
| 2.5. DECOMMISSIONING AND CLOSURE PHASE8 |
| 3. DESCRIPTION OF THE AFFECTED ENVIRONMENT |
| 4. APPROACH TO EIA PROCESS AND PUBLIC PARTICIPATION15 |
| 4.1 OVERVIEW OF APPROACH ADPTED FOR COMPILING THE SCOPING AND EMP REPORTS15 |
| 4.2 LEGAL CONTEXT FOR THIS EIA15 |
| 4.3 LEGISLATION AND GUIDELINES PERTINENT TO THIS ENVIRONMENTAL ASSESSMENT 16 |
| 4.4 PRINCIPLES FOR PUBLIC PARTICIPATION / CONSULTATION 19 |
| 4.5 PUBLIC PARTICIPATION PROCESS 19 |
| 4.6 AUTHORITY CONSULTATION DURING THE EIA PHASE 20 |
| 4.7 APPROACH TO IMPACT ASSESSMENT AND SPECIALIST STUDIES |
| 5. ASSESSMENT OF ALTERNATIVES AND IMPACTS |
| 5.1 ASSESSMENT OF IMPACTS AND MITIGATION |
| 5.2 ASSESSMENT OF IMPACTS AND MITIGATION26 |
| 6. CONCLUSIONS AND RECOMMENDATIONS |
| 6.1 CONCLUSIONS |
| 6.2 RECOMMENDATONS |
| 6.3 STAKEHOLDER ENGAGEMENT AND MONITORING |
| REFERENCE |
| APPENDIX A: ENVIRONMENTALMANGEMENT PLAN |
| APPENDIX B: PUBLIC CONSULTATION |
| RESUME OF EAP |

1. INTRODUCTION

The Environmental Management Act No. 7 of 2007 (also referred to as the EMA) and its Regulations promulgated in the Government Gazette No. 4878 of 2012, stipulates that for each developmental activity, which is listed as those that may not be undertaken without obtaining and Environmental Clearance Certificate (ECC), an Environmental Assessment (EA) must be conducted. The proposed handling, storage and transportation of fuel and mineral commodities triggers some listed activities in terms of the EMA.

Therefore, an environmental assessment must be conducted with an aim to identify, assess and ascertain potential environmental impacts that may arise as a result of undertaking the proposed operations. Hence, the environmental assessment is a process by which the potential impacts, whether positive or negative are predicted / identified, findings interpreted and communicating to interested and affected parties (I&APs) for inputs.

Additionally, this report presents findings of an environmental scoping process that evaluates the likely socio-economic and environmental effects the proposed operation, and further identifies suitable mitigation measures for avoiding or minimizing the predicted impacts. The envisioned EIA process was undertaken in a holistic approach encompassing different elements as shown in **Figure 1**.



Figure 1: Anticipated Environmental Assessment Timeline

1.1. PROJECT APPLICANT AND PROJECT OVERVIEW

Theopaldt Properties Two cc (TPT-2) is a fully registered, 100% Namibian owned company. Their aim is to provide construction aggregate to the nation's infrastructure industry in particular for road construction. The TPT-2 business model is based on the supply of high quality sand and gravel to the civil construction, roads, mining, and agricultural sectors. TPT-2 owners have obtained a Sand Harvesting Permits form the relevant authority (MAWLR, see Appendices).

TPT-2 have determined through extensive market research that Windhoek is experiencing a shortage of sand for construction purposes, subsequently rendering some capital projects under review in terms of time completion agreements and in some instances projects are behind schedule with up to 4 months. In addition, TPT-2 has secured provisional contract to supply contractors of the Roads Authority with the needed sand and gravel for the

construction of the Windhoek – Hosea Kutako International Airport B1 Road expansion project.

1.2. PROJECT MOTIVATION (INCLUDING NEED AND DESIRABILITY)

Currently 90% of sand provided for construction purposes in Windhoek comes from Usib River in Groot Aub and Swakop River in Okahandja areas. Since most of the rivers north of Windhoek have been depleted while others have been enclosed in developments, many business players in the sand and gravel sector are sourcing the raw material from a far. This results in a high cost of business and subsequently raising the cost aggregates material and making it unaffordable to the general consumers.

Overall, the extraction and processing activities is expected to generate full time medium to long term direct employment for at least 5-10 workers. The majority of workers to be employed on the proposed extraction and processing project are expected to be skilled and/or semi-skilled (general labourers and operators).

Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

1.3. REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT ASSESSMENT

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socioeconomic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition Theopaldt Properties to undertake its operation in compliance with the environmental legislative requirements in Namibia.

To ensure that development activities are undertaken in an economic, social and environmental sound / sustainable manner, the Namibian Constitution and Environmental Management Act No. 7 of 2007 provides for an environmental assessment process.

The purpose of the environmental assessment and therefore this report are to ensure compliance of the proposed operations with the environmental legislation in respect to managing potential impacts associated with the proposed Theopaldt Properties Extraction and processing activities operations:

- Identifying potential socio-economic and environmental impacts
- Proposing management measures to avoid, prevent and of mitigate these
- Compile an Environmental Management for compliance monitoring and reporting on the implementation of the Environmental Clearance Certificate conditions

Table 1: List of activities identified in the EIA Regulations which apply to the proposed project

| EMA 2007 Legislation | Description of activity | Relevance to Theopaldt Properties Investment Extraction and processing Activities |
|---|---|---|
| Activity 3 (3.1 & 3.2) Quarrying and Quarrying Activities | 3.1 The construction of facilities for any process or activities which requires a license, right or other form of authorization, and the renewal of a license, right or other form of authorization, in terms of the Minerals (Prospecting and Quarrying Act), 1992. 3.2 Other forms of quarrying or extraction of any natural resources whether regulated by law or not | And the construction of facilities for the purpose of carrying out a listed activities The quarrying or extraction of any natural resources whether regulated by law or not. |
| Activity 4 | 4. The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorization in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law. | The clearance of vegetation areas to allow the quarrying activity to take place |

Therefore, Theopaldt Properties appointed Enviro-Leap Consulting to conduct an environmental assessment and facilitate the process of obtaining and Environmental Clearance Certificate.

1.4. EIA TEAM

In order to undertake the EIA required for the proposed project. A public participation process (PPP) forms an integral part of the Environmental Assessment Process to aid in identifying issues and possible alternatives for consideration. Details on the PPP are included in section 4 of this Scoping Report.

| NAME | ORGANISATION | ROLE/ SPECIALIST STUDY UNDERTAKEN |
|----------------------------|---------------------------|-----------------------------------|
| Environmental Assessment P | ractitioners | |
| Shadrack Tjiramba | Enviro-Leap Consulting cc | Environment Practitioner |
| Lawrence Tjatindi | Enviro-Leap Consulting cc | Internal Reviewer |

1.5. DETAILS AND EXPERTISE OF THE EAP

Over the past four years the Enviro-Leap Consulting has been involved in a multitude of Environmental Assessment projects across SADC and within Namibia. The Environmental Practitioners of Enviro-Leap Consulting has a combined of more than 35 years' experience in the environmental sector (management and policy), ecological research and stakeholder engagement. Consequently, the team offers a wealth of experience and appreciation of the environmental and social priorities and national policies and regulations in Namibia.

1.6. OBJECTIVES OF THE ENVIRONMENTAL SCOPING ASSESSMENT

The primary objective of this EA Report is to present stakeholders, I&APs and the Competent Authority, the DEA, with an overview of the predicted impacts and associated management actions required to avoid or mitigate the negative impacts; or to enhance the benefits of the proposed Theopaldt Properties operations.

In broad terms, the 2012 EMA EIA Regulations (GG 4878) stipulates that an EIA Process must be undertaken providing to determine the potential environmental impacts, mitigation and closure outcomes, as well as the residual risks of any listed activity. Therefore, based on these (EIA Regulations), the objectives of the Environmental Assessment (EA) Process is to:

- determine the policy and legislative context within which the activity is located and note how the proposed activity complies with and responds to the policy and legislative context;
- describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;
- determine the nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and the degree to which these impacts (a) can be reversed; (b) may cause irreplaceable loss of resources, and (c) can be avoided, managed or mitigated; and
- identify suitable measures to avoid, manage or mitigate identified impacts;

In terms of legal requirements, a crucial objective of the Environmental Scoping or EIA Report is to satisfy the requirements of EIA Regulations in respecting to obtaining an Environmental Clearance Certificate. This section regulates and prescribes the content of the Scoping Report and specifies the type of supporting information that accompany the submission of the ECC application to the Competent Authority.

2. PROJECT DESCRIPTION

This section provides an overview of the conceptual overview of the proposed Sand and Aggregate Extraction, storage and processing, sites and technology selection process for identifying the most suitable extraction and processing techniques to be adopted.

2.1. OVERVIEW OF THE PROPOSED EXTRACTION AND PROCESSING ACTIVITIES

The sand mining activity adopts the Dry-pit Channel approach which entail the excavated of shallow (less than 2 meter deep) sand pit within the active channel on dry intermittent or ephemeral streambeds. The suitable equipment for this type of mining is with conventional Front-end loader, scrapers and loaders (**Figure 4**). Dry pits are often left with abrupt upstream margins, from which head cuts are likely to propagate upstream.



Figure 4: Illustration of a typical sand extraction and processing site (Photo: ELC, 2020)

The sand will then be loaded onto trucks and brought to a mobile screening unit where the product will be screened and separated according to size and quality and subsequently put through a washing process to remove other contaminants such as mica and other micro sediments.

The bulk product will then be transported to the client for use in road building, civil construction and brick making activities. In short TPT-2 will be:

- a) Mining
- b) Screening
- c) Washing
- d) And transporting sand.

The TPT-2 business model is based on the supply of high quality sand and gravel to the civil and roads construction. TPT-2 holds a Sand Mining Permits issued by the Ministry of Agriculture, Water and Forestry, accompanied by a consent letter from the relevant

Traditional Authority. Activities of the preconstruction and construction phases are summarized below as follows:

- Existing access road grading: To facilitate the ease of circulation for vehicles transporting employees, construction material, equipment and sand mining implements, the existing road will be upgraded;
- Site clearing and ground preparation / foundation: The necessary land clearing will be undertaken as per design of civil engineers for the infrastructural setup;
- Fencing: A fence will be erected and will remain in place after commissioning in order to regulate access to both the sand mining and quarry site to ensure health, safety and security onsite;
- Commissioning: The Theopaldt Properties Two cc sand mining project will commence any mining activities once the Environmental Clearance Certificate (ECC) has been granted.

2.2. PROJECT LOCATION

The proposed operation site is situated in central Namibia, about 60 km east of the capital city, Windhoek and about 15 km east of the Hosea Kutako International Airport (**Figures 4 and 5**, and corner coordinates on **Table 3**). The site is accessible initially via the Trans-Kalahari Highway (B6 road) that connects the airport, Witvlei and Gobabis to the capital, it is then accessed via an existing farm road.



Figure 4: Locality map of the extent of the MAWLR Permit for the sand extraction at Seeis, Khomas Region



Figure 4: Locality map of the proposed extraction and processing activity's site or area in the Khomas Region

| Corner point | Latitude | Longitude |
|-----------------------------------|-------------|------------|
| A – Star of River Stretch point 1 | -22.421119° | 17.560684° |
| B – Star of River Stretch point 2 | -22.421522° | 17.559681° |
| C – End of River Stretch point 1 | -22.451209° | 17.625408° |
| D – End of River Stretch point 2 | -22.453666° | 17.625406° |

 Table 3: Corner coordinates of the proposed development site.

2.4. SUPPORTING INFRASTRUCTURE

2.4.1 Basecamp

Given the location of the Sand Mining Site is situated in a region with high tourism activity, an entirely new base-camp is not primarily recommended but rather a suitable community campsite must be rented for the duration of the extraction and processing and or mining activity. Otherwise, a suitable site must be identified in collaboration with all relevant authorities including the Traditional Authority. Where practical and possible, it is strictly recommended that for unskilled labour, local community members are employed and thus accommodated at their existing homestead to mitigate and reduce potential conflict with the conservancy wildlife and livestock management protocols.

Therefore, it is highly recommended that temporary ablution facilities must be provided and limited to within the existing base-camp footprint pre-identified protected area campsites, and the necessary authorization must be obtained prior to installation of any such facility.

In terms of waste generation and management, the predominant type of waste that will be generated during the extraction and processing activities, in small volumes, is domestic waste i.e. packaging material (paper, wooden box, plastic sampling bags), and potentially hydrocarbons from diesel oil should a power generator needed. Domestic waste must be stored in heavy duty garbage bags and disposed of correctly at the Keetmanshoop waste disposal site.

2.4.2 Water supply

At this stage water will be mainly required for domestic consumption and to a small degree for operational purposes as cooling agent for the diamond-core drilling and for dust suppression. Water can be supplied through existing farm boreholes (with the permission of the land owners) and or if necessary new boreholes shall be developed explicitly for the extraction and processing activities by Theopaldt Properties in which case a permits must be obtained.

2.4.3 Power supply

In respect to domestic power needs, a diesel generator shall be utilized to generate the needed power. However, the various machinery and equipment required for extraction and processing e.g. vehicles are self-powered by means petrol / diesel engines and or generators, hence there is need for on-site fuel in either small mobile bowser or barrel drums on a concrete slab at the base-camp. The drill rigs will either be refuelled with Jerry cans or directly from the bowser.

2.4.4 Access roads / tracks

As far as is practical, all site particularly the extraction sites shall be accessed through existing tracks, therefore no new roads or tracks will be created. Additionally, it is highly recommended that motorised access is minimised as much as practically possible, especially during geological mapping, sampling and geophysical surveys. Equally, all new access routes should be identified and agreed upon with the landowners and demarcated prior to the commencement of activities.

2.4.5 Waste (Domestic / Hazardous) Management

Domestic Waste: Different waste containers will be provided onsite for waste sorting and safe disposal of waste generated onsite. These will be collected on a monthly basis and sent to nearest approved waste management facility in the area such as Keetmanshoop.

Sanitation: Portable ablution facilities with septic tanks will be put up for sanitation purposes for the extraction and processing and mining teams and will be emptied in good time according to manufacturers' instructions.

2.5. DECOMMISSIONING AND CLOSURE PHASE

Taking into consideration that the proposed project does not involves any construction activities, decommissioning is not foreseen during the validity of the Environmental Clearance Certificate. Consequently, any impacts associated by default with this phase of a project are not applicable to the proposed activity.

However, should the proponent at any stage of the proposed project intend to construct any infrastructure, such must be subject to a separate environmental assessment.

3. DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter of the Scoping Report provides an overview of the affected environment for the proposed extraction and processing activities. The receiving environment is understood to include biophysical, socio-economic and heritage aspects which could be affected by the proposed development or which in turn might impact on the proposed development.

3.1 BIOPHYSICAL ENVIRONMENT

Namibia is characterized by four land type systems, the Namib, which runs along the entire west coast from the port town of Lüderitz, northwards into southern Angola; the Succulent Karoo which lies south of Lüderitz and extends across the Orange River into South Africa; the Nama Karoo which occurs immediately to the east of the previous two desert systems and covers most of the southern third of Namibia, tapering to a narrow belt from central Namibia northwards; and the Southern Kalahari which extends eastwards across to Botswana. However, the Trans-Zambezi route only crosses through three of these, namely the Namib Desert, Nama Karoo and the tree and shrub savannah.

3.1.1 Climatic Conditions

About 22% of Namibia's land is classified as desert (hyper-arid), 70% is classified as arid to semiarid and the remaining 8% is classed as dry sub-humid (Mendelsohn et al. 2003). In Khomas, the summers are sweltering and mostly clear; the winters are short, comfortable, windy, and clear; and it is dry year round. Over the course of the year (**Figure 6**), Climate and Average Weather Year Round in Windhoek or at the Hosea Kutako International Airport area, the summers are long, hot, and partly cloudy; the winters are short, cool, windy, and clear; and it is dry year round.

| 50 | % overca | ast | | | 93% | clea | r | | | | |
|----------|-----------|------|-----|-----|------|---------|-----|------------|----------|-----|-----|
| precipit | ation: 95 | mm | | | | 0 mm | | | | | |
| | muggy | :0% | | | dry | | 0% | | | | |
| hot | | warm | | | comf | ortable | | warm | | hot | |
| | | | | | Now | 5.7 | | tourism so | ore: 8.3 | | |
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |

Figure 7: Combined graphs of climate data (Rainfall, Annual Average maximum and minimum Temperatures), at Hosea Kutako International Airport which is the closest to in the Khomas Region

Over the course of the year, the temperature typically varies from 7°C to 32°C and is rarely below 3°C or above 36°C year (Figure 7),. The hot season lasts for 4.4 months, from October 2 to February 13, with an average daily high temperature above 29°C. The hottest month of the year at Windhoek Hosea Kutako International Airport is December, with an average high of 31°C and low of 16°C.

The cool season lasts for 2.4 months, from May 25 to August 4, with an average daily high temperature below 23°C. The coldest month of the year at Windhoek Hosea Kutako International Airport is July, with an average low of 2°C and high of 21°C (Mendelsohn et al. 2003).



Figure 6: The daily average high (red line) and low (blue line) temperature at Usakos. The thin dotted lines are the corresponding average perceived temperatures (Weather Sparks, 2024)

Rainfall is highly erratic and unpredictable with an inter-annual coefficient of variation that ranges from about 30% in the north-east to over 100% in the driest areas. The rainy period of the year lasts for 6.8 months, from October 11 to May 5, with a sliding 31-day rainfall of at least 13 millimeters. The month with the most rain at Windhoek Hosea Kutako International Airport is February, with an average rainfall of 92 millimeters.

The rainless period of the year lasts for 5.2 months, from May 5 to October 11. The month with the least rain at Windhoek Hosea Kutako International Airport is July, with an average rainfall of o millimeters.



Figure 8: The average rainfall (solid line) accumulated over the course of a sliding 31-day period centred on the day in question, the thin dotted line is the corresponding average snowfall. (Weather Sparks, 2024)

The prominent hourly average wind vector (speed and direction) at 10 meters above the ground at Windhoek Hosea Kutako International Airport varies throughout the year (Figure 9). The wind is

most often from the north for 6.1 months, from March 21 to September 24, with a peak percentage of 56% on July 3. The wind is most often from the east for 2.6 weeks, from September 24 to October 12 and for 3.9 months, from November 23 to March 21, with a peak percentage of 28% on October 2. The wind is most often from the west for 1.4 months, from October 12 to November 23, with a peak percentage of 28% on October 20.



Figure 9: The percentage of hours in which the mean wind direction is from each of the four cardinal wind directions, the lightly tinted areas at the boundaries are the percentage of hours spent in the implied intermediate directions (northeast, southeast, southwest, and northwest (Weather Sparks, 2024)

All of Namibia, except for the coastal plains, experiences humidity of below 30% during the day for much of the year - in the north-east for about six months, the north-centre for seven months, the central area for eight months and in the south for all 12 months. High temperatures and low humidity result in high rates of evaporation. Evaporation rates from an open body of water inland of the coastal plains range from about 2000 mm to over 2660 mm per annum (Olivier, 1995).

3.1.2 Geology

The claims are located within the Damara Granit and Swakop Formations of the Damara orogenic belt (**Figure 10**), which is geologically characterised by rocks of Nosib and Swakop Groups mainly. According to (Miller, 2008), this zone has been thrusted northward over the Otavi, Mulden and pre-Damara rocks along the Khorixas-Gaseneirob thrust. The Nosib Group in the area is present to the west of the claims, representing a tectonic window (fenster) where felsic pyroclastic rocks, ignimbrite, ash-flows and lavas strongly recrystallized of the upper Naauwpoort Formation are present. These units are overlain by the Swakop Group units of the Ugab Sub-group and Kuiseb Formation locally



Figure 10: Simplified geology of Simplified geological map of Namibia. Modified after Clifford (2008).

The Damara Orogen represents a Wilson cycle with extension during the breakup of Rodina, spreading, sedimentary deposition, subduction and orogenesis during which metasediments and igneous rocks, including a large number of pegmatites, of the orogen formed (Prave, 1996; Trompette, 1997). Miller (1979, 1983, and 2008) divided the Damara Orogen into a number of tectono-stratigraphic zones based on variations in structure, stratigraphy, igneous activity and metamorphic history. The various pegmatite belts roughly occur in different zones and therefore at different stratigraphic levels within the Damara Orogen.

The distribution of lithium in Namibia, which significantly occurs primarily within pegmatites. These Precambrian and early Namibian pegmatites are restricted to two different areas respectively, the Damara Orogen in north-central Namibia and the Namaqua Metamorphic Complex in southern Namibia. Of particular interest to proposed Sand Mining Site are nearer to the Helikon-Rubicon Belt / Pegmatite District – Khomas (Schneider 1992).

3.1.3 Terrestrial Ecology

Namibia's vegetation and biomes are classified into five major types, shown in. These are, the Namib Desert, Nama Karoo, Succulent Karoo and the Trees and Shrub savannah. The proposed project area fall mainly within the Desert biome and thus the fauna and flora key

receptors of environmental impact particularly in case of trampling and vehicle tracks, potential poaching and ground contamination resulting from the project activities.

Overall terrestrial diversity of plants and animals is highest in the north-eastern parts of Namibia (**Figure 11**, green map indicator), because of the higher rainfall and presence of wetlands and forest habitats that are not found elsewhere in the country. Many species in the north are also more tropical, with ranges that extend into neighboring countries to the north and north-east. Species richness is highest in Namibia's mesic wetlands and woodlands in the vertebrate classes particularly (Barnard 1998).



Figure 11: Shows a comparison of overall terrestrial species diversity (green) against overall endemism (brown), with the most endemism observed within the central to north western region

However, due to its low productivity, the western desert arid zone is endowed with modest diversity of species compared to more mesic habitats. What is most distinctive about Namibian biodiversity is its high degree of endemism within the western (Khomas) region (Barnard 1998).

Unlike the concentration of biodiversity in the north-east, the great majority of Namibia's endemic species are found in the dry western and north-western Region (Barnard 1998, Mendelsohn et al. 2002). The patterns of endemism reflect the importance of arid habitats in supporting unique and specially adapted species.

The vegetation in the study area is diverse and includes a number of species endemic to the central and northern Namib as well as various protected species such as *Gomphocarpus fruticosus* (milkweed), *Zygophyllum simplex* (simple *Zygophyllum*), *Zygophyllum stapffii* (dollar-bush), *Arthraerua leubnitziae* (pencil bush), *Monechma cleomoides* (Namib perdebos) and *Kleinia longiflora* (sjambok bush).

Every vegetation type supports at least one, more often several endemic or protected species. As a result of this, as well as the low recovery potential of the vegetation, there are no vegetation types of low sensitivity. Classified as highly sensitive are the granite and dolerite outcrop shrubland and their associated vegetation types in the vicinity, the camel

thorn shrubland in the north-east of the study area, the tamarisk shrubland of the Khomas mountain landscape.

In birds, the greatest diversity of southern African endemics is centered on the arid savannah and Karoo biomes and extends into the escarpment (Brown et al. 1998). Highland areas of the country, including Waterberg, Khomas Hochland, Karas Mountains, Brandberg, inselbergs in the Sperrgebiet and the Karstveld are particularly important for many endemic plants (Mendelsohn et al. 2002).

3.2 SOCIO-ECONOMICAL ENVIRONMENT

3.2.1 Demographic Profile

According to the Chamber, although mining is not the largest employer, this is a significant contribution given Namibia's small population and its high level of unemployment, which was reported by the Namibia Statistics Agency to have increased to 29,6% in 2013. Of the 7 582 permanent jobs recorded in 2013, expatriates counted 353 (4,7%) whereas Namibians occupied 7 229 jobs (95, 3%). Although the mining industry alone does not employ a large number of individuals as compared to other primary industries, it remains the backbone of the Namibian economy.

3.2.2 Heritage and Culture Profile

In Namibia, archaeological resources are often vulnerable to developmental and mining impacts. Typical sites do not only include those found in the mountains, hills and outcrops but also those generally found in the flat areas (Namib Desert) and or in riverbeds.

Some of these site types are might be obvious to some observer, such as rock art or historical mines. Others are quite ambiguous and might appear less significant than they are, such as pre-colonial stone features. This means that it is very difficult for mining projects to avoid damage to archaeological heritage sites if they have not been located, identified and made known during EIA process.

According to Kinahan, (2017) the large assemblage of ceramic vessels from Habis represent an important addition to the regional archaeological picture. Evidence from the early colonial period relates to mining in the Arandis area and a combination of trade, missionary activity, and wagon repair in the Otjimbingwe area. Both Arandis and Otjimbingwe are centres of historical importance and have several National Monument sites recognized under the National Heritage Act.

However, it remains necessary that in the absence of extensive heritage and culture studies in the region there remains a possibility of encountering numerous undeclared artefacts / sites of heritage importance. A search and find procedure (**Appendix C**) must be strictly followed in accordance with the stipulations of the Namibian National Heritage Act in the highly unlikely event that artefacts are found in the sand mining area.

4. APPROACH TO EIA PROCESS AND PUBLIC PARTICIPATION

This chapter presents the approach to the Environmental Scoping Assessment process, for the proposed Theopaldt Properties' extraction and processing activities and gives particular attention to the legal context and guidelines applicable to this assessment. The assessment approach and the steps in the Public Participation component of this scoping report were undertaken in accordance with Regulations 29 and 30 of Government Notice No. 30 of 2012. Overall, this section highlights information including the approach to stakeholder engagement, identification of issues, overview of relevant legislation, and key principles and guidelines that provide the context for this scoping assessment process. Hence, in a nutshell, the purpose of the environmental assessment is to:

- Address issues that have been identified through the Scoping Process;
- Assess alternatives to the proposed activity in a comparative manner;
- Assess all identified impacts and determine the significance of each impact; and
- Recommend actions to avoid/mitigate negative impacts and enhance benefits.

4.1 OVERVIEW OF APPROACH ADPTED FOR COMPILING THE SCOPING AND EMP REPORTS

The objectives of the environmental scoping assessment are noted in Section 1 of this Report. Section 6 of this Scoping Report includes a summary of the findings, the overall conclusions and the recommendations. The Scoping Report was made available for a 30-day I&AP and authority review period, as outlined in the EMA Regulations of 2012. Although adverts were put in the **Confidente local newspaper** on 21st – 27th **April** and 28th **April – 04 May 2023** and again **03 February – 09 February 2023**, and then in **The Villager** newspaper initially on the 21st **April 2023** and 28th **April 2023**, and again on 19th and 23rd **April 2024** in order to notify and inform the public of the proposed projects and invite I&APs to register, there were no particular responses or inputs received but registration by one I&AP (see **Appendix B** for detailed report).

As previously noted, the Scoping Report includes an Environmental Management Plan (EMP, **Appendix A**). The EMP is based broadly on global environmental management principles and embodies an approach of continual improvement and mitigation actions.

These are drawn primarily based on the identified potential impacts for both the construction and operational phases of Theopaldt Property's proposed operations. If the project components are decommissioned or re-developed, this will need to be done in accordance with the relevant environmental standards and clean-up / remediation requirements applicable at the time.

4.2 LEGAL CONTEXT FOR THIS EIA

In accordance with the provisions of the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 gazette and the Environmental Management Act, (EMA), 2007, (Act No. 7 of 2007), the activity to be undertaken by Theopaldt Properties may not be undertaken without an Environmental Clearance Certificate.

4.3 LEGISLATION AND GUIDELINES PERTINENT TO THIS ENVIRONMENTAL ASSESSMENT

As the main source of legislation, the Namibian constitution makes provision for the creation and enforcement of applicable legislation. In this context and in accordance with its constitution, Namibia has passed numerous laws (those of relevant to this project are listed in Table 2) intended to protect the natural environment and to mitigate adverse environmental impacts.

Namibia's policies provide the framework to the applicable legislation. Whilst policies do not often carry the same legal recognition as official statutes, policies can be and are used in providing support to legal interpretation when deciding cases. Below are several of the key legislations applicable to the governance of certain component / aspects of the proposed operation activity. Key acts and policies currently in force include:

- Namibia's Environmental Assessment (EIA) Policy for Sustainable Development and Environmental Conservation (1995)
- Environmental Management Act (No. 7 of 2007);
- Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012)
- Namibia Agriculture Policy of 2015
- Namibia Vision 2030, and other national development plan e.g. Harambee Prosperity Plan
- Social Security Act, 1994 (Act No. 34 of 1994) and the Affirmative Action (Employment) Act, 1998 (Act No. 29 of 1998)

4.3.1 Environmental Management Act No. 7 of 2007

The environmental management act No.7 of 2007 aims to promote the sustainable use of natural resources and provides the framework for the environmental and social impact assessment, demands precaution and mitigation of activities that may have negative impacts on the environment and provision for incidental matters. Furthermore, the act provides a list of activities that may not be undertaken without an environmental clearance certificate.

The purpose of the Environmental Management Act is:

- a) to ensure that people carefully consider the impact of developmental activities on the environment and in good time
- b) to ensure that all interested or affected people have a chance to participate in environmental assessments
- c) To ensure that the findings of environmental assessments are considered before any decisions are made about activities which might affect the environment see *Figure 12.*



Figure 12: Illustration of the environmental assessment process in Namibia (Source: Risk Based Solution)

4.3.2 Environmental Assessment Policy (1995)

The Environmental Assessment Policy for Sustainable development and Environmental Conservation emphasize the importance of environmental assessments as a key tool towards implementing integrated environmental management. Sets an obligation to Namibians to prioritize the protection of ecosystems and related ecological.

The policy subjects all developments to environmental assessment and provides guideline for the Environmental Assessment. The policy advocates that Environmental Assessment take due consideration of all potential impacts and processes mitigations measures should be incorporated in the project design and planning stages (as early as possible).

4.3.12 Minerals Act

This Act No. 33 of 1992 provides a legal framework for regulating and governing all activities that explicitly entails the prospecting, extraction and processing and mining of minerals within the boundaries of Namibia and the Ministry of Mine and Energy is the competent authority in this regard.

It also makes explicit reference to the protection and conservation of the natural environment by requiring for the development of an environmental impact assessment and management plan in which measures to avoid and or mitigate potential impacts relating to minerals development activities are clearly considered.

4.3.3 Other Legal Requirements and relevance to the proposed activity

In addition to the EMA and the Environmental Assessment Policy, there exist other regulatory frameworks that MDL must comply with. This is due to the supporting infrastructure that are needed to compliment the proposed logistics hub. As such, MDL will be required to obtain additional specific permits for the supporting infrastructure as listed in table 4 below. The process of obtaining the additional permits can be undertaken concurrently to the EIA process.

Furthermore, the proponent has the responsibility to ensure that the project activities conform to all other relevant legal documents and guidelines as listed in **Table 8** below).

| Legislation | Relevance | | | | | |
|--|--|--|--|--|--|--|
| | • Labour matters, rights and duties of | | | | | |
| | employees. | | | | | |
| Labour Act, 1992, (Act No. 6 of 1992) and Regulations Related to Health and Safety of | Health and Safety of Employees Construction safety; | | | | | |
| Employees | • Electrical safety; Machinery safety; | | | | | |
| | Hazardous substances; Physical hazards and general provisions; | | | | | |
| Social Security Act, 1994 (Act No. 34 of 1994) | Establishment of the Social Security Commission | | | | | |
| and the Affirmative Action (Employment) Act, | • Administration of a pension and incidental matters | | | | | |
| 1998 (Act No. 29 of 1998) | fund – affirmative employment opportunities | | | | | |
| | • Declaration of protected areas in terms of | | | | | |
| | soils and water resources | | | | | |
| The Forest Act | Proclamation of protected species of plants | | | | | |
| | and the conditions under which these | | | | | |
| | plants can be disturbed, conserved, or | | | | | |
| | Declaration of protocted areas and | | | | | |
| Nature Conservation Amendment Act | protected species. | | | | | |
| | Protection and conservation of places and | | | | | |
| | objectives of significance, as all | | | | | |
| National Heritage Act | archaeological and paleontological objects | | | | | |
| | helong to the state | | | | | |
| | beiong to the state | | | | | |

Table 8: Other relevant legislation and applicability thereof (Source: Risk Based Solution)

4.3.4 Precautionary and Polluter Pays Principles

The Precautionary Principle is worldwide accepted when there is a lack of sufficient knowledge and information about proposed development possible threats to the environment. Hence if the anticipated impacts are greater, then precautionary approach is applied.

Equally, the Polluter Pays Principle ensures that the proponent takes responsibility of their actions. Hence in cases of pollution, the proponent bears the full responsibility and cost to clean up the environment.

4.4 PRINCIPLES FOR PUBLIC PARTICIPATION / CONSULTATION

The PPP for this Scoping Process was driven by a stakeholder engagement process that includes inputs from authorities, I&APs and the project proponent. In respect to provisions of the EIA Regulations, "Public Consultation" means a process referred to in regulation 21, in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters. This stems from the requirement that people have a right to be informed about potential decisions that may affect them and that they must be afforded an opportunity to influence those decisions. Effective public participation also improves the ability of the Competent Authority (CA) to make informed decisions and results in improved decision-making as the view of all parties are considered.

Contrary, it is important to recognize and highlight two key aspects of public participation which must be considered at the outset:

- There are practical and financial limitations to the involvement of all individuals within a PPP. Hence, public participation aims to generate issues that are representative of societal sectors, not each individual. Consequently, the PPP is designed to be inclusive of a broad range of sectors relevant to the proposed activity.
- The PPP will aim to raise a diversity of perspectives and will not be designed to force consensus amongst I&APs. Certainly, diversity of opinion rather than consensus building is likely to enrich ultimate decision-making. Therefore, where possible, the PPP will aim to obtain an indication of trade-offs that all stakeholders (i.e. I&APs, technical specialists, the authorities and the development proponent) are willing to accept with regard to the ecological sustainability, social equity and economic growth associated with the project.

4.5 PUBLIC PARTICIPATION PROCESS

The key steps and or approach adopted for this particular Scoping assessment has been confirmed with the DEA through the registration of the proposed activity / operations on their Online EA system.

All advertisements, notification letters and emails etc. served to notify the public and organs of state, on both the call for registration as I&APs and of the availability of the Scoping and EMP reports for an opportunity to comment or provide input on the reports. Despite the national Lockdown due to the COVID19 pandemic, which affected the possibility for public meetings, adverts were placed consecutively (at 14 days interval) in local newspapers **Confidente local newspaper** on 21st – 27th **April** and 28th **April – 04 May 2023** and again 03 **February – 09 February 2023**, and then in **The Villager** newspaper initially on the 21st **April 2023** and 28th **April 2023**, and again on 19th and 23rd **April 2024** in order to notify and inform the public of the proposed projects and invite I&APs to register.

The correspondence sent to or received from I&APs and other competent authorities during the Scoping Phase were incorporated into the stakeholder engagement report appended to this report (**Appendix B**).

4.6 AUTHORITY CONSULTATION DURING THE EIA PHASE

Authority consultation is integrated into the PPP, with additional one-on-one meetings held with the lead authorities, where necessary. A pre-application meeting was scheduled with the relevant competent authorities prior to the Lock-down, however were later cancelled. It is proposed that the Competent Authority (DEA) as well as other lead authorities be consulted as necessary and at various stages during the application review process of the DEA. During the Scoping phase, the following authorities were identified and consulted (see **Appendix C**) for the purpose of consultation:

4.7 APPROACH TO IMPACT ASSESSMENT AND SPECIALIST STUDIES

Potential environmental impacts were identified through both desktop literature review and consultation with I&APs, regulatory authorities, specialist and Enviro-Leap Consulting. In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The impacts are discussed under issue headings in this section. The discussion and impact assessment for each sub-section covers the construction, operational, decommissioning and closure phases where relevant. This is indicated in the table at the beginning of each sub-section. Included in the table is a list of project activities/infrastructure that could cause the potential impact per farming phase. The activities/infrastructure that are summarized in this chapter, link to the description of the proposed project (see Section 5 of the EIA report).

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the EMP report that is attached in **Appendix A**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only.

Both the criteria used to assess the impacts and the method of determining the significance of the impacts is outlined in **Table 9**. This method complies with the method provided in the Namibian EIA Policy document and the draft EIA regulations. **Part A** provides the approach for determining impact consequence (combining severity, spatial scale and duration) and impact significance (the overall rating of the impact). Impact consequence and significance are determined from **Part B** and **C**. The interpretation of the impact significance is given in **Part D**. Both mitigated and unmitigated scenarios are considered for each impact.

Table 9: Criteria for Assessing Impacts

| | | PART A: DEFINITION AND CRITERIA | | | |
|--|----|--|--|--|--|
| Definition of SIGNIFICANCE | | Significance = consequence probability | | | |
| Definition of CONSEQUENCE | | Consequence is a function of severity, spatial extent and duration | | | |
| Criteria for ranking of the SEVERITY/NATURE of environmental | н | Substantial deterioration (death, illness or injury). Recommended level will often be violated. Vigorous community action. Irreplaceable loss of resources. | | | |
| impacts | Μ | Moderate/measurable deterioration (discomfort). Recommended level will occasionally be violated. Widespread complaints. Noticeable loss of resources. | | | |
| | L | Minor deterioration (nuisance or minor deterioration). Change not measurable/will remain in the current range. Recommended level will never be violated. Sporadic complaints. Limited loss of resources. | | | |
| | L+ | Minor improvement. Change not measurable/will remain in the current range. Recommended level will never be violated. Sporadic complaints. | | | |
| | M+ | Moderate improvement. Will be within or better than the recommended level. No observed reaction. | | | |
| | H+ | Substantial improvement. Will be within or better than the recommended level. Favorable publicity. | | | |
| Criteria for ranking the | L | Quickly reversible. Less than the project life. Short-term | | | |
| DURATION of impacts | Μ | Reversible overtime. Life of the project. Medium-term | | | |
| | Н | Permanent beyond closure – Long-term. | | | |
| Criteria for ranking the | L | Localized-Within the site boundary. | | | |
| SPATIAL SCALE of | Μ | Fairly widespread–Beyond the site boundary. Local | | | |
| Impacts | Н | Widespread – Far beyond site boundary. Regional/national | | | |

PART B: DETERMINING CONSEQUENCE

| SEVERITY = L | | | | | | | | |
|--------------|-------------|---|---|--|---|--|--|--|
| DURATION | Long-term | Н | Medium | Medium | Medium | | | |
| | Medium term | М | Low | Low | Medium | | | |
| | Short-term | L | Low | Low | Medium | | | |
| - | | | SEVERITY = M | | | | | |
| DURATION | Long-term | Н | Medium | High | High | | | |
| | Medium term | М | Medium | Medium | High | | | |
| | Short-term | L | Low | Medium | Medium | | | |
| | | | SEVERITY = H | | | | | |
| DURATION | Long-term | Н | High | High | High | | | |
| | Medium term | М | Medium | Medium | High | | | |
| | Short-term | L | Medium | Medium | High | | | |
| | | | L | М | Н | | | |
| | | | Localized Within site boundary Site | Fairly widespread Beyond site boundary | Widespread Far beyond site boundary | | | |
| | | | | STATILE SCALE | | | | |

| PART C: DETERMINING SIGNIFICANCE | | | | | | | |
|----------------------------------|---------------------|---|--------|-------------|--------|--|--|
| PROBABILITY | Definite/Continuous | Н | Medium | Medium | High | | |
| (of exposure to impacts) | Possible/frequent | М | Medium | Medium | High | | |
| | Unlikely/seldom | L | Low | Low | Medium | | |
| | | | L | М | Н | | |
| | | | | CONSEQUENCE | | | |

| PART D: INTERPRETATION OF SIGNIFICANCE | | | | |
|--|--|--|--|--|
| Significance | Decision guideline | | | |
| High | It would influence the decision regardless of any possible mitigation. | | | |
| Medium | It should have an influence on the decision unless it is mitigated. | | | |
| Low | It will not have an influence on the decision. | | | |

*H = high, M = medium and L = low and + denotes a positive impact.

This section outlines the assessment methodology and legal context for specialist studies, as recommended by the DEA 2006 Guideline on Assessment of Impacts. In addition to the above, the impact assessment methodology includes the following aspects:

Spatial extent – The size of the area that will be affected by the impact/risk:

- Site specific;
- Local (<10 km from site);
- Regional (<100 km of site);
- National or International (e.g. Greenhouse Gas emissions or migrant birds).

Consequence – The anticipated consequence of the risk/impact:

- Extreme (extreme alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they permanently cease);
- Severe (severe alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Substantial (substantial alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Moderate (notable alteration of natural systems, patterns or processes, i.e. where the environment continues to function but in a modified manner); or
- Slight (negligible alteration of natural systems, patterns or processes, i.e. where no natural systems/environmental functions, patterns, or processes are affected).

Duration – The timeframe during which the impact/risk will be experienced:

- Short term (less than 1 year);
- Medium term (1 to 10 years);
- Long term (the impact will cease after the operational life of the activity (i.e. the impact or risk will occur for the project duration)); or
- Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient (i.e. the impact will occur beyond the project decommissioning)).

Probability – The probability of the impact/risk occurring:

- Very likely or Likely;
- Unlikely or Very unlikely; and
- Extremely unlikely

5. ASSESSMENT OF ALTERNATIVES AND IMPACTS

5.1 ASSESSMENT OF IMPACTS AND MITIGATION

This chapter discusses the alternatives, as well as the selection process of the preferred alternatives that have been considered and assessed as part of the Scoping Phase. The 2012 EIA Regulations (GG4878) define "alternatives", in relation to a proposed activity, "as different means of meeting the general purpose and requirements of the activity, which may include alternatives to the:

- property on which or location where the activity is proposed to be undertaken;
- type of activity to be undertaken;
- design or layout of the activity;
- technology to be used in the activity; or
- operational aspects of the activity; and
- Includes the option of not implementing the activity".

The Scoping Report therefore provided a full description of the process followed to reach the proposed preferred activity, site and location within the site. It further includes the following as a minimum:

- The consideration of the no-go alternative as a baseline scenario;
- A comparison of the reasonable and feasible alternatives; and
- Providing a methodology for the elimination of an alternative.

5.1.1 NO-GO ALTERNATIVE

The no-go alternative assumes that the proposed project will not go ahead i.e. the proposed Theopaldt Properties' proposed mineral prospecting does not realize. This alternative entails that the operations would not drive any environmental change and result in no additional environmental impacts on the Sand Mining Site.

It favors the *status quo* or baseline against which other alternatives are compared and will be considered throughout the report. However, the likely negative environmental impacts of other current and future user that may still happen in the absence of the proposed activities includes: Natural dust and generation of particulate matter during windy event particularly resulting from other regional economic activities such as construction, mining and tourism, pollution and environmental degradation associated with current land use along and around the proposed project route and sites.

Therefore, in terms of the "No-go Alternative", potential economic gains that may never be realized if the proposed project activities do not go-ahead include: loss in income for both the local community and the partnering investor, unemployment and the loss of socioeconomic benefits derived from current and future mineral extraction and processing and development opportunities. Most importantly, is the reduced regional integration in terms of trade and investment, loss of direct and indirect contracts and employment opportunities, export earnings, foreign direct and various taxes payable to the Government. The initial site for the proposed Theopaldt Properties Two cc sand mining project was selected by the project proponent in consultation with the Ministry of Agriculture, Water and Land Reform for the purpose of the sand mining activities. However, during the site visit and scoping assessment it was discovered that alternatives sites should be considered and suitable ones recommended.

Favorably, the existing approval allows for sand mining along a stretch of about 8 km within the Seeis River with the boundaries of Farm Seeis No. 134/16, thus making it possible for choosing alternative sites where sensitive receptors are not in close proximity. The settlement at the initial site consist of a police station and residential units which could be affected by both noise and dust impacts generated from the activities on windy days. Also, several existing grounder water boreholes were observed in close proximity of SM Priority Site (Figure 7).



Figure 13: Two alternative sites were identified and are depicted herewith and a section of "Proposed Extraction Site 1" is recommended to host the proposed project activities.

On consideration of alternatives for suitable sites, two possible mining areas were identified and one considered to be less sensitive and thus recommended as the main site. The other sections of the river may be used as mobile sites, these could site were minimal sand extraction should be done and were no processing should be allowed. Hence, sand at Preferred Sites 1 should be excavated, loaded directly onto the trucks and transported, and not processed onsite. In addition, no servicing of equipment must be done on these two sites.

Further considerations taken into account during the site selection process are; that the area is sparsely inhabited, easily accessible, not in an area prone to flooding (therefore the sand mining infrastructure and personnel are at minimal risk). Given that there is a presence of hand-dug wells for water supply to the locals, it is deemed that the aquifer is shallow and

thus a key decision factor for not recommending preferred sites 1 and 2 due to their proximity to these infrastructures.



Figure 14: On consideration of alternatives for technology and plant design use at the proposed sand mining processing plant, the above has preference.

5.1.5 CONCLUDING STATEMENT ON ALTERNATIVES

Namibia's industrial ambition is articulated in Vision 2030, which stipulates that the country should be an industrialized nation with a high income by the year 2030. In terms of the production and export structure, Namibia aspire to build the bridge from producing and exporting predominantly primary commodities to offering value added and service-orientated products. The production and export structure would also be more diverse, enabling the economy to better withstand exogenous shocks.

Despite the limited capacity to process minerals locally, Namibia is considered the preferred nation of choice in terms mining given its vast unexploited distribution of mineral resources. Alternative prospecting techniques and use equipment is recommended as far as enhancing environmental safety is concerned.

In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The No-Action Alternative comparative assessment, suggests that environmental impacts of a future in which the proposed activities do not take place, may be good for the receiving environment because there will be no potential negative or positive environmental impacts associated with the proposed activities (mineral extraction and processing).

5.2 ASSESSMENT OF IMPACTS AND MITIGATION

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the EMP report that is attached in **Appendix A**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only

5.2.1 IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

Potential impacts in respect to the Biophysical (**Table 7**) environment involves particularly the terrestrial environments and relate mainly to the mineral prospecting and mining activities in regard to sampling (drilling and or bulk –sampling).

Potential impacts in respect to the Biophysical environments (**Table 7 - 8**) involves, given that the proposed activity entails non-invasive and consumptive mining development activities but rather limited to prospecting presents mainly secondary potential impacts. Geological surveys and rock sampling, and desktop research creates opportunity for the project staff members to access otherwise reserved park areas and thus temptations for poaching and collection of natural resources. Details of the potential impacts are demonstrated in the following tables:

Table 7. Impact on the Biophysical Environment – Sand Mining Site Access and use of vehicles

| Impact Event | Disturbances on Biodiversity | | | | | | | |
|---------------------------|--|---|---------------|-----------------------|--------------|-----------|------------------|--|
| Description | Off-road | driving is a r | najor conc | ern, particularly v | vith regar | d to unc | ontrolled use | |
| | of 4x4 v | of 4x4 vehicles. This leads to physical degradation and the destruction of unique | | | | | | |
| | habitats | habitats, especially sensitive biophysical environments | | | | | | |
| | Tracks le | eave scars that | at can rema | in for centuries, a | affecting t | the aest | netic qualities | |
| Nature | of the d | unes and the | surround | ng gravel plains, | reducing | the attr | activeness of | |
| | the area | as a recreat | ional desti | nation. Littering | of the be | aches ai | nd the desert | |
| | due to li | icreasing tou | irism is a g | eneral problem. (| amping o | outside (| or designated | |
| Phases Phases during | which the | project has | implicatio | ns of accessing | the sand | mining | site area are | |
| highlighted below: Sign | nificance ass | essment was | s carried o | it on the use of a | access tra | acks whi | ch presents a | |
| short-term risk. | | | | | | | | |
| | | | | Decommiss | ioning | | | |
| Construction Phase | O | perational Ph | lase | Phase | 2 | Po | ost Closure | |
| No Construction | Access | ing of sand r | mining site | | | | | |
| envisaged at this | area fo | or surveys and | d sampling | | | | | |
| stage | with p | roject vehicle | S | NI/A | | N1/A | | |
| | Upgra | ding of acce | ess tracks | N/A | | IN/A | | |
| | (e.g. g | (e.g. grading) | | | | | | |
| | Taken to | gether, the c | listurbance | es will have a mini | mum to n | nedium | severity given | |
| Severity | that limit | ited number | of vehicles | s will be used an | d no new | access | track will be | |
| | created, | these can be | drastically | minimized to very | y low with | mitigati | on measures. | |
| | The Sign | ificance of th | ne potentia | l impacts is very | high give | n the pr | oject location | |
| Duration | i.e. near | a protected a | area and w | ithin a town | | | | |
| | Low, loc | alized if activi | ities are res | tricted to the kno | wn pegm | atite be | ts area within | |
| Spatial Scale | the sance | l mining site t | hus limitin | g potential impac | ts spatiall | ly | | |
| | Low to A | /ledium, espe | cially in res | spect to wildlife / l | ivestock (| collision | and poaching | |
| Probability | as the sh | te is located a | along a rive | r stream where n | nnimum p | bresence | e of livestock / | |
| Trobability | witchite | | Spatial | | Probabil | ity of | | |
| Unmitigated | Severity | Duration | Scale | Consequence | Occurre | ence | Significance | |
| 0 | L-M | L | L | Н | L | L | Н | |
| | | | Spatial | | Probabil | ity of | | |
| Mitigated | Severity | Duration | Scale | Consequence | Occurre | ence | Significance | |
| | L | L | L | L | 1 | L | Н | |
| | Strict compliance with the Park Management guidelines and EMP is | | | | | | | |
| Concontual | recom | mended in re | spect to m | anaging incidenta | al events; | | | |
| Description of | Extract | tion and pro | ocessing a | ctivity must be | limited 1 | to the | pre-identified | |
| Mitigation Measures | pegma | tites belts wi | thin the sa | nd mining site are | ea | | | |
| generation | Unless | necessary an | id agreed v | vith the Park man | agement, | no new | access tracks | |
| | shall b | e created and | l no lodgin | g shall be allowed | l in sensiti | ive zone | S | |

Table 8. Impact on the Biophysical Environment – Borrow pit excavation

| Impact Event | Disturba | nces on Biod | liversity in | respect to samp | ling and trenchi | ng activities |
|--|--|--|--|--|-----------------------------------|------------------------------------|
| Description | Since th adopting If not w human i Also, if expose t | Since the major activity entails the extraction of sand and aggregate material adopting the borrowing approach, it is very likely that open pits will be created. If not well managed these tend to results in loss of livestock/wildlife and or human in instances where the pits are deep and with a steep angle inwards. Also, if dug too deep, they create a potential for salinization as they these | | | | |
| Nature Phases: Phases during v | Dependi vegetati well as Consequ • No • Dis dis • Pot vhich the pr | expose the groundwater table to over-evaporation. Depending on the scale of borrowing (intensity), potential impacts relating to vegetation clearing for access tracks may arise from the project activities. As well as habitats defragmentation particularly in respect to riparian species. Consequential impacts therefore are: Noise from sampling machineries and potential spill of hydrocarbons Disturbance of habitats (protected plant species) and species displacement Potential littering with solid waste | | | | |
| Significance assessment | t was carried | d out on the s | ampling / | trenching phase v | which presents a | long term risk. |
| | | | | Decommissionir | Ig | |
| No Construction Phase No Construction envisaged at this stage | Operational PhasePhasePost Closu• Upgrading of access tracks to reach to sand mining site area for extraction of material• Clearing of top-soil and vegetation exposing water tables toN/AN/A | | | | N/A | |
| Severity | Taken together, the disturbances will have a medium severity given that limited number of vehicles will be used and no new access track will be created, these can be drastically minimized to very low with mitigation measures. | | | | | |
| Duration | The Sign i.e. near Low, loo | ifficance of th <u>a protected a</u> calized if acti | e potentia area and w vities are | al impacts is very vithin a town restricted to the | high given the p e known pegma | roject location tite belts area |
| Spatial Scale | within th | ne sand minin | ig site area | a thus limiting po | tential impacts s | oatially |
| Probability | Low to N | /ledium, espe | cially in re | spect to wildlife / | livestock collisior | n and poaching |
| Unmitigated | Severity M | Duration L | Spatial Scale L | Consequence H | Probability of Occurrence L | Significance M |
| Mitigated | Severity L | Duration L | Spatial Scale L | Consequence L | Probability of Occurrence L | Significance M |
| Conceptual Description of Mitigation Measures | Strict compliance with the Forestry Act and Regulations in respect to vegetation clearing, Park Management guidelines and EMP is recommended in respect to managing incidental events; Extraction and processing activity must be limited to the pre-identified river stretch within the sand mining site area thus reducing the spatial impacts to key areas of the sand mining site Temporary bins and spill kits must be provided to ensure that all waste material including hydrocarbons are well contained prior to final disposal at approved sites in either Seeis Settlement or Windhoek Unless in an emergency, no equipment (vehicles and drill rigs) should be serviced in the field thus preventing unnecessary spillage of hydrocarbons | | | | | |

Table 9. Impact on the Biophysical Environment – Waste Management (Effluent, Solid and Hydrocarbons)

| Impact Event | Waste g | eneration and | d disp | osal | | | | |
|---|---|---|---------|--------|---------------------|----------|---|----------------|
| Description | Operation actual g the gene lubrican | Operational activities relating to mainly the lodging and to a lesser degree the actual geological surveying and sampling activities present an opportunity for the generation of both solid waste (litter material) and hydrocarbons (fuel and lubricants) | | | | | er degree the portunity for ons (fuel and | |
| Nature | In general, prospecting activities generates very little domestic solid waste which includes but may not be limited to: Litter materials i.e. plastic bags, cartons, food packages and Effluents and sewer may only be generated in case where a base-camp is necessary and a bathroom with flushing toilets are used Minor hydrocarbons spillage(fuels and lubricants), possible contamination of soils and groundwater, in case of hydrocarbon spillage mainly from maintenance of equipment and vehicles | | | | | | | |
| Phases: Phases during | g which the | project has | implic | atior | ns of waste gene | eratio | n are highli | ghted below; |
| Significance assessmen | t was carrie | d out on the s | ampli | ng / t | renching phase v | vhich | requires on- | site stays. |
| Construction Phase | Oper | ational Phase | | | Phase | 3 | Post | Closure |
| No Construction | | | d at | | FlidSe | | FUSI | Closure |
| envisaged at this stage | existin lodge | g campsite within the par | / k | | N/A | | 1 | N/A |
| Severity | Taken to | gether, wast | e gene | erati | on in respect to th | he pro | oposed activ | ities presents |
| | impacts | that are of ve | ry-lov | v sev | erity as in genera | l little | e is generated | d. |
| | The dura | ation of the p | otenti | ial im | pacts is bound to | o the | duration of | the proposed |
| Duration | operatio | ons thus short | -term | in na | ture | | | |
| | Low, wa | ste generatio | n shal | lbel | imited mainly to t | he lo | dging areas a | and subject to |
| Spatial Scale | property | y owners and | thus r | not e | ntirely influence b | by the | e proposed p | roject |
| Deshahilite | Very Lov | w, shall be lin | nited i | main | ly to the lodging | area | s and subjec | t to property |
| Probability | owners | | Spati | | luence by the pro | Prot | a project | |
| Unmitigated | Severity | Duration | Scale | e | Consequence | | currence | Significance |
| ommugatea | L | L | L | | M | | L | L |
| | | | Spati | ial | | Prot | oability of | |
| Mitigated | Severity | Duration | Scal | e | Consequence | Осо | currence | Significance |
| | L | L | L | L | L | | L | L |
| Conceptual Description of Mitigation Measures | LLLLL• Given that lodging is recommended to be at existing camp-sites and or lodges, this aspect shall be managed as part of the current property owners compliance requirements• In the field, hydrocarbon waste shall be contained (in spill kits) and stored in appropriate heavy-duty plastic cabbage , transported to the nearest waste-oil recycling / solid waste disposal facility in Seeis Settlement or Windhoek• A sufficient number of spill kits shall be acquired and strategically placed, particularly near every sampling site to ensure that timely response to any potential fuel and lubricant spills is conducted (should the project require any sampling activities to be undertaken). These shall include an on-site used oil disposal bin(s)• Equally, effluent waste shall be managed in compliance with the lodging host's requirements, although during any sampling activities – temporary dry-pit toilet facility must be provided at every site. | | | | | | | |

5.2.2 IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Table 10. Environmental Impact: Human Health and Safety

| Impact Event | Disturba | ances to the s | ocial er | vironments | | | |
|---|---|---|---|---|--|--|---|
| Description Nature | During the extraction and processing stage, social impacts are most likely to be minimal and often positive. At this stage, usually the level of interaction between project staff and or project equipment with the local community is significantly minimum and therefore potential health and safety risks very low. However, given the Corvid-19 pandemic it is recommended that all protocol in this respect are observed throughout the extraction and processing phase. The inter-migration of project staff in-and-out of the region may present potential risks of disease transmission particularly in respect to Corvid-19 and other contagious diseases between the local community and project staff. The most significant impact in respect to health is the potential for increasing the strain on the already under capacitated local health services facility should project staff fall ill while in the field. | | | | | | |
| Phases: Phases during | which sourc | es of social (h | nealth a | nd safety) im | pacts apply | are highlight | ed below; |
| Construction Phase | Oper | ational Phase | | Decommi: Pha | ssioning | Pos | t Closure |
| N/A | Use of the lodging and other social facilities, as well as other social interactions | | | N/A | | 103 | N/A |
| Severity | In the u | nmitigated so us diseases is | cenario, High | , the potentia | l risk for tra | ansmission o | f contagious / |
| Duration | The Sign national and the | nificance of health proto local commu | the pot cols, ho nity imp | cential impac wever given bacts are class | ts is subjec the minimal sified as inci | t to the cor interaction c dental and sh | mpliance with of project staff nort-term. |
| Spatial Scale | Medium may be testing f Low, es | , in case of r medium to h or Corvid-19 l pecially giver | iear-mis igh but before o n that t | ss incidents (localized if fo coming for fie there are clea | were cases or instance Idwork. ar guideline | are not dete project staff | ected) the risk undergo prior ols governing |
| Unmitigated | Severity | Duration M | Spatia Scale | I Conseque | ence Oc | bability of currence | Significance |
| Mitigated | Severity M-L | Duration | Spatia Scale | l Conseque | Pro ence Oc | bability of currence | Significance H |
| Conceptual Description of Mitigation Measures | M-L L L M L H Strict compliance with the EMP is recommended in respect to managing incidental events; It is strictly advised that project staff ensures that in respect to Corvid-19, are tested prior to venturing in the field (and carries a health certificate indicating a negative result, which is not older than 72 hours) Carry sufficient First Aid equipment to ensure that minor injuries reduces need to access local health facility and therefore minimizing potential strain on local services Strict compliance with national health protocols as and when directive are issued in respect to any disease outbreak and or recurring pandemics such as HIV / AIDS and Corvid-19 Strict ban on use of any toxic substances within and during the working environment must be prohibited and serious punitive actions taken against any transgressors is recommended | | | | | | |

Table 11. Impact on the Social Environment – Air and Noise Pollution

| Impact Event | Disturbances to the social environment | | | | | | |
|---|---|---|--|---|--|---|---|
| Description | Since th adopting If not w human in if dug to groundy | Since the major activity entails the extraction of sand and aggregate material adopting the borrowing approach, it is very likely that open pits will be created. If not well managed these tend to results in loss of livestock/wildlife and or human in instances where the pits are deep and with a steep angle inwards. Also, if dug too deep, they create a potential for salinization as they these expose the groundwater table to over-evaporation. | | | | | |
| Nature | Dependi relating be gene • No | ing on the s to the use of rated. Consec ise from mini | cale of s large veh quential in ng equipi | and mining (inte iicles such as a dril mpacts therefore ment and machine | nsity), po I rig truck are: eries may | otential i c and or e be antici | noise impacts excavator may pated |
| Phases: Phases during v | which source | es of social (A | ir and No | ise Pollution) impa | icts apply | are highl | ighted below; |
| Construction Phase | Oper | ational Phase | 2 | Decommission Phase | ing | Pc | ost Closure |
| Land preparation and setting-up of drill sites Setting-up Base- camp for project staff | Upgrading tracks mining extract Clearing vegeta water evapor | Upgrading of access tracks to reach to sand mining site area for extraction of material Clearing of top-soil and vegetation exposing water tables to evaporation Structure demolition and ground leveling activities Temporary lodging for decommissioning staff | | | | | N/A |
| Severity | Taken to scenario or mitiga | ogether, the b. In the mitiga ated to accep | disturbar ated scen stable lev | nces will have a h ario, many of thes els, which reduces | igh sever e disturba the seve | rity in the ances can rity to lov | e unmitigated be prevented v. |
| Duration | The Sign | ificance of the | ne potent e identifié | ial impacts is subj | ect to the | e propose | ed operation's |
| Spatial Scale | Low, loc lead to i site whic | alized althou ncreased traf | gh cumul ffic. The n | ative as haulage a oise aspect is mai areas. | long the nly limite | designate d to the f | ed routes may reedlot facility |
| Probability | limited t | w, the only h to the constru | oisy activ | decommissioning | g g | roposed | operation are |
| Unmitigated | Severity | Duration | Spatial Scale | Consequence | Probab Occur | ility of rence | Significance H |
| Mitigated | Severity L | Duration | Spatial Scale | Consequence | Probab Occur | ility of rence | Significance H |
| Conceptual Description of Mitigation Measures | L L L L L L H Strict compliance with the EMP is recommended in respect to managing incidental events; Noise complaint register must be kept and maintained regularly with mitigation measures adopted accordingly. All excessive noise generating activities must be strictly carried out during the day between o8hoo (am) and 17hoo (pm) week days only. Conditions of the Environmental Clearance Certificate and Surface-use Agreement (with the relevant Traditional Authority and Park) must be accordingly adhere to. As much as possible, it is recommended that vehicles with the most minimum footprint are used such as smallest excavator and or portable tipper trucks (drawn on a trailer) | | | | | | |

Table 12. Impact on the Economic Aspect

| Impact Event | Disturba | inces on soc | ial and econd | mic aspects | | |
|--|--|---|--------------------------------|--|--------------------------------------|-------------------------------|
| Description | Potential economic gains that may never be realized if the proposed project activities does not go-ahead include: loss in potential alternative income for the town, unemployment and the loss of socio-economic benefits derived from future mining development opportunities. | | | | | |
| Nature | However, it is imperative that the community is made aware that a major possible impact of extraction and processing is the unrealistic expectations about the development of a mine. It's important for local communities to bear in mind that most extraction and processing activity will not advance to mine development | | | | | |
| Phases: Phases during highlighted below; | g which sou | irces of soc | ial (potential | social and econ | omic gain) impa | cts apply are |
| Construction Phase | Opera | tional Phase | D e | ecommissioning Phase | Post | t Closure |
| Land preparation and construction activities | Use of and facilitie other interact Potent develo | Use of the lodging and other social facilities, as well as other social interactions Potential Mine development Structure demolition and ground leveling activities Retrenchments, retirement and losses due to clophene | | | | |
| Severity | In the unmitigated scenario, this implies in the case where the activity take not take effect, no economic benefits shall realize hence, the severity in respect to unemployment shall be very high. However, with the implementation of the proposed operations, the severity of unemployment shall be reduced to medium. | | | | | |
| Duration | The Sign life-time | ificance of t , with a long | he potential: -term potent | impacts is subjec ial | t to the propose: | d operation's |
| Spatial Scale | Low, loc commur | alized and c nity | only limited to | the Seeis Settle | ment or Windhoe | ek Settlement |
| Probability | Low – N during e operatio | 1edium, pro xtraction an n) phases | bability in re d processing | spect to job crea) and long-term (| tion on both the during Mine deve | e temporary (elopment and |
| Unmitigated | Severity | Duration | Spatial Scale | Consequence | Probability of Occurrence | Significance |
| Mitigated | L-M Severity | L Duration | L Spatial Scale | L Consequence | L Probability of Occurrence | L Significance |
| Conceptual Description of Mitigation Measures | It is critical that timely and continuous communication and dissemination of information with the local community is ensured to alleviate potential sense of social marginalization, drive gender equality and enhance the understanding and perception of the benefits associated with Theopaldt Properties Investment activities To enhance the positive impacts relating to marginal net benefits for the microeconomy (local residence of Seeis Settlement or Windhoek Settlement and Khomas at large) and national economy at larger, legislative provisions to Affirmative Action and Labour Welfare must be observed It is strictly recommended that Theopaldt Properties Investment negotiates and signs a Surface Use Agreement detailing aspects of conduct and benefit distribution with all key stakeholder i.e. Traditional Authority, Park and other Operators or support institutions of a NCOS VCCO. | | | | | |

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

Namibia is an up-and-coming source country for critical minerals, which are important for renewable energy technologies. The country has the potential to develop new mining projects for cobalt and lithium, and therefore it has in recent years seen great interest towards the extraction and processing and development of mineral commodities by foreign investor.

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socioeconomic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. Therefore, to ensure that development activities are undertaken in an economic, social and environmental sound / sustainable manner, the Namibian Constitution and Environmental Management Act No. 7 of 2007 provides for an environmental assessment process.

In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

Overall, potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of visual intrusion, dust and noise pollution especially during the field-based activities i.e. sampling and or trenching.

Below is a summary of the likely positive impacts that have been assessed for the different phases of the proposed Theopaldt Properties cc's sand and aggregate material mining activities:

- Socio-economic development and capacity building through partnering with foreign operators / investors, skills transfer and training on the mining development sector shall be achieved (Likely impacts are high).
- Creation of employment opportunities and strengthening /expansion of SME business
- Consequential Infrastructure development e.g. development of a Mine should viable deposit be discovered.

The following is a summary of the likely negative impacts that have been assessed for the different phases of the existing sand mining project:

- Ambient Air Quality and Noise Pollution (Likely impacts are Low).
- Ecological and biodiversity loss (Likely impacts are localized and low).
- Health and safety (Overall likely impacts are low with the adoption and compliance of appropriate mitigation measures).

- Accidental Spill of Hazardous substance (Likely impacts are low with proper implementation of the environmental management plan in place).
- Cultural Heritage, Archaeological and Scenic value (Likely impacts are low with proper implementation of the environmental management plan in place).

6.2 **RECOMMENDATONS**

Enviro-Leap environmental practitioner confidently recommends that the proposed project can proceed and should be authorized by the DEAF. The proposed operations is considered to have, overall low negative environmental impacts and potential for the enhancement of socio-economic benefits provided all protocols including the proposed mitigation measures are adhered to.

Based on this, it recommended that the proponent must upon obtaining their Environmental Clearance Certificate (ECC), implement all appropriate management and mitigation measures and monitoring requirements as stipulated in the Scoping Report and or as condition of the ECC. These measures must be undertaken to promote and uphold good practice environmental principles and adhere to relevant legislations by avoiding unacceptable impacts to the receiving environment.

6.3 STAKEHOLDER ENGAGEMENT AND MONITORING

It is important that channels of communication are maintained over the life-time of the proposed mineral prospecting project, and with all key stakeholders, members of the general public (including I&APs), as well as the local and traditional authorities, **Table 13** shows the stakeholders engagement recommendations.

| Issue | Management commitment | Phase |
|--|---|-------|
| Development and maintenance of a Stakeholder engagement plan | On obtaining the Environmental Clearance Certificate and other relevant authorization it is recommended that the proponent undertakes a stakeholder engagement process to develop a Communication and Monitoring Plan for continuous reporting and feedback | All |
| | Maintain and update the stakeholder register, including stakeholders' needs and expectations. Ensure that all relevant stakeholder groups are included building on pre-identified and registered I&APs. | All |
| Understanding who the stakeholders are | A representative database would include all relevant local government, service providers and contractors, indigenous populations, local communities, Traditional Authorities (TAs), NGOs, shareholders, the investment sector, community-based | A 11 |
| | Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process. Record partnerships as well as their roles, responsibilities, capacity | All |
| | and contribution to development. | All |
| Liaising with interested and affected parties at all phases in the mine life | Devise and implement a stakeholder communication and engagement strategy. | All |
| Responsibility | Theopaldt Properties Investment and Enviro-Leap Consulting (On- contract) | - |

Table 13: Actions relating to stakeholder communication

A stakeholder engagement plan is an important tool in ensuring that a good working relationship is maintained between the proponent and the community within which the activities are undertaken. It is crucial that this plan is developed in the same transparent manner and approach as the environmental assessment, and that it remains a living document which allows the stakeholder to engage with throughout the duration of the proposed activity.

Equally, it must be at all time readily available on request to all interested and affected parties for review and must provide clear procedures for how and where it can be accessed.

Bar-On, Y.M., Phillips, R., Milo, R., 2018. The biomass distribution on Earth. P. Nat. Acad. Sci. USA 115 (25), 6506–6511.

Beukes, N.J. Swindell, E.P.W. Wabo, H. 2016. deposits of Africa. Episodes 39 (2): 285-317.

Brimblecomb, P. and Grossi, C.M. 2010. Potential Damage to Modern Building Materials from 21st Century Air Pollution. The Scientific World Journal 10: 116-125. Directorate of Environmental Affairs, 2008. Procedures and Guidelines for Environmental Impact Assessment (EIA) and Environmental Management Plans (EMP), Directorate of Environmental Affairs, Ministry of Environment and Tourism, Windhoek.

- Government of the Republic of Namibia. 2004. Namibia Vision 2030: Policy Framework for Long-Term National Development. Office of the President, Windhoek.
- Geological Survey of Namibia, 1999.Regional geological map of Namibia. Ministry of Mines and Energy, Windhoek, Namibia.
- Government Gazette, 27 December 2007. No. 3966, Act No. 7, 2007 Environmental Management Act 2007.

Henderson, L. 2001. Alien Weeds and Invasive Plants: A Complete Guide to Declare Weeds and Invaders in South Africa. Plant Protection Research Institute: Agricultural Research Council.

- Herbarium of Namibia (WIND). 2015. BRAHMS Database. National Herbarium of Namibia (WIND), National Botanical Research Institute, MAWF, Windhoek, Namibia.
- JICA. 2015. An International Logistics Hub for SADC Countries in the Republic Of Namibia. The Government of the Republic of Namibia, Windhoek.
- Klaassen, E. & Kwembeya, E. 2013. A Checklist of Namibian Indigenous and Naturalised Plants. National Botanical Research Institute: Windhoek.
- Mannheimer, C. & Curtis, B. A. (eds) 2009. Le Roux and Müller's Field Guide to the Trees and Shrubs of Namibia. Windhoek: Macmillan Education Namibia.
- Mauran, G. Lebon, M. Lapauze, O. Detroit, F. Bahain, J.-J. 2020. Archaeological ochres of the rock art site of Leopard Cave (Khomas, Namibia): looking for Later Stone Age socio-cultural behaviours. African Archaeological Review, 2020, 10.1007/s10437-020-09394-7. hal-02568815
- Mendelsohn, J., Jarvis, A., Roberts, C. & Robertson, T. 2003.Atlas of Namibia. David Philips Publisher. Cape Town.
- Ministry of Environment and Tourism, 2002.Atlas of Namibia. Comp. J. Mendelsohn, A. Jarvis, T. Roberts and C. Roberts, David Phillip Publishers, Cape Town.
- Müller, M.A.N. 1984. Grasses of South West Africa/Namibia. John Meinert Publishers, Windhoek, Namibia.
- Newmans, K. Birds by Colour, Southern Africa Common Birds Arranged by Colour, Struik New Holland Publishing 2000.
- Namibia Statistics Agency, 2014. Namibia Intercensal Demographic Survey 2016 Report. Namibia Statistics
- Von Schmettau, Konny (28 February 2013). "Usakos-Kurze Blüte, schneller Fall" [Usakos-Short Rise, Fast Fall]. Allgemeine Zeitung (in German). Tourismus Namibia monthly supplement. p. 9.

APPENDIX A: ENVIRONMENTALMANGEMENT PLAN

6. ENVIRONMENTAL IMPACT

6.1 Overall Objectives of the EMP

The following overall environmental objectives have been set for the TPT-2 cc Project:

- To comply with national legislation and standards for the protection of the environment.
- To limit potential impacts on biodiversity through the minimization of the footprint (as far as practically possible) and the conservation of residual habitat within the mine area.
- To keep surrounding communities informed of farming activities through the implementation of forums for communication and constructive dialogue.
- To ensure the legal and appropriate management and disposal of general and hazardous waste, through the implementation of a strategy for the minimization, recycling, management, temporary storage and removal of waste.
- To develop, implement and manage monitoring systems to ensure good environmental performance in respect of the following: ground and surface water, air quality, noise and vibration, biodiversity and rehabilitation.

The Management and Mitigation Plans (MMPs), listed in the table below, are applicable to all the relevant activities and facilities of the Sand Mine. (The MMPs follow in the subsequent sections).

6.2 Stakeholder Management and Mitigation

It is important that channels of communication are maintained over the life of the project for surrounding landowners, the general public members, as well as the local and traditional authorities, table 4 shows the stakeholders communication Management and Mitigation Plan.

| Issue | Management commitment | Phase |
|--|---|-------|
| | Maintain and update the TPT-2 cc stakeholder register, including stakeholders' needs and expectations. Ensure that all relevant stakeholder groups are included. | All |
| Understanding who the stakeholders are | A representative database would include government, employees, service providers, contractors, indigenous populations, local communities, traditional authorities, NGOs, shareholders, customers, the investment sector, community- based organizations, suppliers and the media. | All |
| | Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process. | All |
| | Record partnerships as well as their roles, responsibilities, capacity and contribution to development. | All |
| Liaising with interested and affected parties at all phases in the mine life | Devise and implement a stakeholder communication and engagement strategy. | All |
| Responsibility | Theopaldt Property Two cc | |

Table 2: Actions relating to stakeholder communication

6.3 Topography Management and Mitigation6.3.1 Issue: Security and safety impact

Impacts relating to the welfare, health and safety of the local communities may arise as a result of traffic, noise, air quality, pollution issues, etc. During the construction phase TPT-2 cc may at a minimal provide job opportunities to the local community.

Hazardous excavations and infrastructure include all structures into or off which third parties and animals can collide, fall and be harmed. In the construction and decommissioning phases these hazardous excavations and infrastructure are usually temporary in nature, usually existing for a few weeks to a few months. The operational phase will present more long-term hazardous infrastructure. It is essential that safety and security measures are defined and implemented to adequately protect the mine site from being accessed by unauthorized people.

| Issue | Management commitment | Phase |
|--|--|-------------|
| Hazardous excavations | All staff will be trained to attend to third parties and animals so as to avoid situations where people and animals can enter safety risk areas. | All |
| Safety and Security Risks | At closure, permanent warning signs will be in place at appropriate intervals, in appropriate languages with danger pictures to warn people of any potential dangerous farm areas / equipment | All |
| Access to the site by unauthorized persons to the farming site | Any person entering the agricultural / cultivation and other operation areas (fields and packaging) will only be allowed after formal approval. | All |
| Emergency | Develop and implement an emergency response plan for third parties falling into or off hazardous excavations and causing injury. | Operational |
| Responsibility | Theopaldt Property Two cc | |

Table 3: Hazardous excavations & infrastructure - link to phase & activities

6.4 Biodiversity Management and Mitigation

6.4.1 Issue: General physical disturbance of biodiversity

The section is a high level assessment of biodiversity impacts in line with the content of the baseline description (Section 4), and the content of the EMP (Appendix E). The assessment covers the following broad topics: physical destruction of biodiversity and related functions, impacts on surface water resources as an ecological driver, and general disturbances to biodiversity.

| Issue | Management commitment | Phase |
|--|--|--|
| Physical disruption to biodiversity by Staff | The Principle of zero tolerance to killing and collecting of biodiversity i.e. no poaching (including collection firewood) will be allowed and poaching offenders will be prosecuted. | All |
| | All species with a conservation and or protection status should be identified, clearly marked and preserved (by at least 50%) | Construction |
| Physical disruption to biodiversity by | Erect a game-proof fence around the pit and mining operations to ensure that animals have no access to operation areas, which may be contaminated by agricultural chemicals. | All |
| infrastructures | Upon completing construction, initiate restoration of all infrastructure including roads areas that were only impacted during construction and will not be required for farming operation | Operation, decommissio ning and closure |
| Emergency | Certain instances of injury to animals may be considered emergency situations. These will be managed in accordance with the TPT-2 cc Investment emergency response procedure. | All |
| Responsibility | Theopaldt Property Two cc | |

Table 4: Physical disturbance of biodiversity - link to phase and activities

6.5 Water Resources Management and Mitigation

6.5.1 Issue: Altering and pollution of Surface and groundwater

The altering and obstructing of surface water drainage (change in water flow and gully erosion of the river beds from channeling of water) is identified as a potential impact associated with the proposed activities, as well as water pollution i.e. through the change to surface water and nutrient flow.

There are a number of pollution sources in all project phases that have the potential to pollute surface and groundwater, particularly in the unmitigated scenario. In the construction and decommissioning phases these potential pollution sources are temporary in nature, usually existing for a few weeks to a few months. Although these sources may be temporary, the potential pollution may be long term. The operational phase will present more long-term potential sources.

| Issue | Management commitment | Phase |
|-------------------------------------|--|-------|
| | Minimize infrastructure footprint and construction footprint | |
| Blocking or deviation of water flow | Avoid placing any infrastructure or waste material across drainage lines. Where unavoidable ensure uninterrupted drainage by constructing bypass channels. | |
| | Do not place service infrastructure in ecologically sensitive | |
| Loss of surface water, and | areas, or in areas identified as corridors of animal | |
| change of drainage patterns | movement. | |
| Natural flour of storms water | Design all storm water interventions in such a way that | |
| Natural flow of storm water | storm water can bypass the major structures. | |
| (clean and dirty) | Ensure that these facilitates are designed, constructed and | |
| | operated that flood protection is provided. | |
| Responsibility | Theopaldt Property Two cc | |

Table 5: Altering surface drainage patterns –link to operation phases and activities

6.6 Air and Noise Management and Mitigation

6.6.1 Issue: Air and noise pollution

Clearing work, cultivation (soil tillage) and herbicides / parasites spraying on site is likely to create very little dust and other possible pollutants that may contribute although little to air pollution. This may be an unwanted change to the community of the area.

| Issue | Management commitment | Phase |
|---|---|-------|
| Air pollution impact to Biodiversity and nearby Human community | All design mitigation measures to be implemented (including water sprays on all roads and temporary unpaved farm roads, waters sprays at highly polluting areas (activity sites) | All |
| | All diesel powered equipment and plant vehicles should be kept at a high level of maintenance. Any change in the noise emission characteristics of equipment should serve as trigger for withdrawing it for maintenance. | All |
| | | |
| Impact of noise on the environment/ sensitive receptors | Document and investigate all registered complaints and make efforts to address the area of concern where possible. A mechanism to monitor noise levels, record and respond complaints and mitigate impacts should be developed. | All |
| Responsibility | Theopaldt Property Two cc | |

| Table | 6. Air | pollution | _ link t | o phase | and | activitios |
|-------|--------|-----------|-----------|----------|-----|------------|
| lable | O. All | ponution | - III K (| lo phase | anu | activities |

6.7 Socio-Economic Management and Mitigation6.7.1 Issue: Economic impacts on local livelihoods

The activities associated with the TPT-2 cc's sand mining have socio-economic impacts in all phases – some positive and some negative. These impacts related to amongst others employment/job creation, local and regional economies, land use and surrounding landowners and community safety and security. During the construction phase TPT-2 cc may at a minimal provide job opportunities to the local community. This EMP aims to provide measures to enhance the positive impacts and limit the negatives impacts.

| Issue | Management commitment | Phase |
|-----------------------|--|--------------|
| Impacts on livelihood | Engage with the affected communities through a process of informed consultation and participation to reach consensus on any activities that affect them. | All |
| resettlement | Provide affected people with necessary transitional support (such as short-term employment, subsistence support, or salary maintenance). | Construction |
| Impacts on HIV / AIDS | Preparation of a health and safety plan for workers and impacted communities addressing issues including education on measures to prevent the spread of HIV/AIDS through awareness campaigns, provision of safety equipment for workers, child Labour prohibited | All |
| Responsibility | Theopaldt Property Two cc | |

Table 7: Health and safety – link to phase and activities/infrastructure

APPENDIX B: PUBLIC CONSULTATION



Dwight Links

International non-governmental organisations collaborating with the Nama and Ovaherero traditional authorities have identified potential new mass grave sites at Shark Island in Luderitz, Namibia.

Forensics Architecture (UK) and Forensis (Germany), the two NGOs involved, said they utilised computer technology to reconstruct the layout of the notorious colonial concentration camp at Shark Island.

"According to Ground Penetrating Radar (GPR) scans, at least one of these grave sites are likely to contain mass graves," the two organisations said.

delve into Namibia's colonial genocide history during the 1904-1908 period.

The newly discovered mass grave sites are at risk of being impacted by planned developments in the Luderitz port and harbour facilities, integral to the country's renewable energy export strategy.

Nama Traditional Leaders Association (NTLA), and the Ovaherero Traditional Authority (OTA), the Namibian government's expansion plans for the nearby seaport threaten to erase parts of the concentration camp and its historical significance.

> The statement highlights how modern infrastructure projects. including tourist facilities, monuments, roads, and commercial structures, have already compromised the integrity of the concentration camp site by being built over it.

> Modern infrastructure, including tourist facilities, monuments to German colonists, roads, and commercial infrastructure have been built over the former concentration camp, compromising its historical significance and permanently removing vital material traces of its very existence," the statement reads.

> Another key development to the Shark Island site is that the planned port expansion will damage any traces of colonial crimes that were committed.

The investigation, initiated in 2022, aimed to "The proposed extension of Lüderitz port in Robert Harbour poses further imminent risk to the site. Not only will the development affect Shark Island, the proposed port expansion will also destroy nearby unmarked burial sites, while dredging of nearby waters will very likely disturb the remains of many who died at Shark Island, and whose bodies were thrown into the water," it reads.

According to a joint statement by the NGOs, the The report associated with this statement also notes that the town and surrounding area of Luderitz is littered with evidence of grave sites.

> "The outskirts of Lüderitz are scattered with numerous grave sites that are very likely the interments of deceased former inmates of Shark Island," the report stated.

> > 0

Not only will the development affect Shark Island, the proposed port expansion will also destroy nearby unmarked burial sites, while dredging of nearby waters will very likely disturb the remains of many who died at Shark Island.



2. PUBLIC PARTICIPATION PROCESS

Enviro Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input. 3. COMMENTS AND QUERIES

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than 17 May 2024.

4. CONTACTS





Monday, 22 April 2024

<mark>۽¥Vill@ger</mark>

NATIONAL NEWS

2

Govt Considers ... Continued From Pg 1

This Act amended the original 1992 legislation, making the state the primary shareholder, while also providing for the dissolution of the holding company and addressing related matters.

As of September 30th, 2022, NPTH's audited financial statements indicate assets totaling N\$5.9 billion, including 123 properties nationwide.

Among these assets, 99 are government grants, and 24 are privately acquired, solidifying NPTH's position as a significant player in the property industry.

NPTH, representing the government's interests, holds stakes in Namibia Post Limited (NamPost) (100%), Mobile Telecommunications Limited (MTC) (reduced from 100% to 60% after listing on the Namibian Stock Exchange), and Telecom Namibia Limited (Telecom) (100%).

The Ministry did not provide specifics regarding the ownership structure of these state-owned enterprises.

Regarding MTC, the government has already sold 40% of its shares to private investors, with further sales anticipated.

However, ownership strategies for Telecom and Nampost remain undisclosed.

The Public Entities Ministry anticipates dividends of N\$1.2 billion following the dissolution of Namibia Post and Telecom Holdings Company NPTH during the upcoming financial year.

Although no exact dates for the dissolution/dismantling of NPTH were provided, the Ministry assured that progress updates on the process will be communicated in due course.

erastus@thevillager.com.na



Local Content Policy ... Continued From Pg 1

Typically, a situational analysis provides insights into the local community's context concerning the issues at hand, aiding in the assessment of societal factors relevant to the application of policies.

However, Shino explained that Namibia decided against conducting such an analysis, deeming it unnecessary.

Instead, she noted that the current draft of the policy was informed by industry practices and experiences from other jurisdictions where oil production is prevalent.

"We did not do a local situation analysis because there was no need. What informed the current draft of the policy is the industry practice; this includes: How have other jurisdictions and other countries where oil is being produced realised the benefits of their production and resources, and what have those countries done to ensure that they maximise the benefits that come to them?".

In March 2023, the Ministry of Mines and Energy announced efforts to finalise a local participation policy for Namibia's expanding oil sector.

The National Upstream Petroleum Local Content Policy seeks to establish a globally competitive petroleum sector that maximises benefits for the country by fostering substantial and enduring involvement of Namibians and local businesses across the entire value chain.

Furthermore, the policy targets diversifying Namibia's revenue sources beyond taxes and royalties by prioritising value extraction through backward, sideways, and forward linkages.

It emphasises technology, knowledge, and skills transfer, advocating for Namibian ownership and financing across all levels of the sector.

The recent three-day conference, organised by the Namibia Chamber of Commerce and Industry (NCCI) in collaboration with Antila Consultancy, aimed to bolster Namibia's local content initiatives.

Themed "Empowering Namibia's Energy Ambitions by Connecting Industry and Indigenous Talent," the event sought to forge connections between the industry and indigenous talent to advance Namibia's energy aspirations.

Delegates and participants at the conference expressed concerns about the effectiveness of the policy, advocating for its transformation into law to ensure full implementation.

This sentiment aligns with recent statements from Mines and Energy Minister Tom Alweendo, who stressed the importance of fostering a locally minded, creative workforce willing to invest in acquiring necessary skills for success.

Responding to queries about enacting the policy into law and extending its scope to other sectors, Shino clarified that the current policy focuses specifically on the petroleum upstream sector.

"It is important to understand and acknowledge that each sector is different, although we are speaking of natural resources and energy.

There are some differences that come within the industry when it comes to the specific application and implementation of the policy," Shino mentioned.

However, she emphasised that the policy will serve as a model for other sectors to adapt and implement according to their needs.

Furthermore, Shino highlighted that the policy will not operate in isolation but will be integrated into broader strategies and frameworks.

Plans are underway to develop monitoring tools and draft regulations to ensure compliance with the policy's provisions.

"We are designing a policy that has monitoring tools. But the monitoring tool is still not sufficient.

Once the policy is adopted, we are also busy drafting regulations, which are then going to be the specific laws that make it mandatory for licence holders and service providers to apply to. So there will be a set of regulations," Shino said.





28 April - 04 May 2023

CONFIDENTE lifting the lid

Page. 21



NATIONAL NEWS

Utoni Nujoma

Kudumo said it is now in the hands of the Ministry to take further steps on the submitted recommendations.

"I can't speak on the report as our task was to investigate and report back to the Minister with recommendations. So what we have found and recommended is basically in the report with the Minister. How they want to deal with the report is up to the Ministry," he said.

The Commission, which was appointed in February 2021, was anticipated to conclude its task by 31 August 2021, after which it would submit the report to the Minister not later than 30 September 2021.

The report, Kudumo said, was submitted in 2022, adding that it was done so within the time frame it was given.

The Wages Commission held public hearings in Windhoek in June 2021, paying close attention to its mandate.

Some areas visited were Aussenkehr and Keetmanshoop in the //Kharas region and Gobabis in the Omaheke region.

The Commission also spoke with a variety of experts and stakeholders, including representatives from the Ministry of Industrialisation, Trade, and SME Development, the Social Security Commission, the Office of the Ombudsman, the Namibia Statistics Agency, the National Planning Commission, the Labour Resource and Research Institute, and the Namibia University of Science and Technology.

The difficulties faced by workers in emerging agricultural industries like charcoal, noncompliance with current wage agreements, and the challenge of balancing the setting of a minimum wage in the context of high unemployment and slow economic growth were highlighted during its last public hearing held at Gobabis on 27 May 2021.

The proposed national minimum wages seek to increase pay, particularly for low-paid workers, increase individual and household incomes, lessen poverty, and promote a reasonable standard of living. According to labour expert Herbert Jauch, the Ministry touring the nation and seeking input, gave some people the chance to take part in those consultations.

"I'm not sure why the report is being withheld at this time; perhaps the Ministry has to fill in a few more details before making it public," Jauch said.

Jauch stressed the necessity for a minimum wage in Namibia to help workers cover their basic requirements and escape the cycle of sacrificial wages.

"

≗Villøger (

Some areas visited were Aussenkehr and Keetmanshoop in the // Kharas region and Gobabis in the Omaheke region.

"

CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED THE EXTRACTION OF SAND AND AGGREGATE FROM THE SEEIS RIVER, KHOMAS REGION

1. PROJECT SITE AND DESCRIPTION

Theopaldt Properties Two cc, intends to apply to obtain an Environmental Clearance Certificate for the proposed Extraction of Sand and Construction Aggregate from the Seeis River, Khomas Region. The key component of the proposed activity entails the extraction of sand and aggregate by front-end loader and transportation to a suitable processing site.

2. PUBLIC PARTICIPATION PROCESS

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input.

3. COMMENTS AND QUERIES

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **21 May 2023.**

3. COMMENTS AND QUERIES

Please register and direct all comments, queries to: Environ-Leap Consulting at Email: eap.trigen@gmail.com



45 Page

NATIONAL NEWS

Agricultural Sector

Local farmers will need to increase investments in technology to address a labour shortage if Namibia continues to see a rural-urban shift and if young people continue to favour white collar jobs, according to Simonis Storm.

The research firm said some of the farmers it spoke to were eager to completely withdraw from the market since they lacked the purchasing power necessary to control the harvest's price.

"In recent years, we have seen an increase in apps, websites and physical informal stalls being created to sell directly to the market and avoid wholesalers. While there is no evidence of farm closures, this remains a risk to long-term food production in the country," said the report.

The value of agricultural output increased from N\$9.71 billion to N\$11.37 billion, a stunning 17% gain in real terms, reaching its highest level since 2015.

With livestock farming being largely unchanged since 2015, the increase in output has primarily been caused by better productivity in the fishery and crop farming sub-sectors.

"This also indicates that the livestock sector was most likely the worst affected by the drought Namibia experienced during 2014 to 2017," Simonis Storm explained.

Additionally, Namibia's agriculture industry received around 8% of all net investments in 2022.

However, since 2020, net investment has been increasing as farmers restocked following the drought and a few crop farming initiatives in Namibia's south and north.

In this light, the research agency had forecast that the agricultural sector will weigh on economic growth in 2023.

According to the report, activity in March 2023 for livestock marketing and exports increased by 38% year-on-year for cattle, sheep and goats.

In February, marketing activity grew by 19% year-on-year and on a monthly basis, livestock marketing increased by 75%.

"The largest driver was sheep marketing, which increased by 53% year-on-year, followed by cattle marketing with a 16% increase y/y, but was weighed down by goat marketing which decreased by 13% y/y."

The first quarter of 2023 showed higher growth than the first quarter of 2022, despite a 57% loss in goat production and a 7% decline in cow production quarter over quarter.

"Total livestock marketing recorded a significant improvement of 15% quarter on quarter, which is only due to the growth in sheep marketing increasing by 60% quarter on quarter."

According to research, from October 2022, there has also been an increase in the slaughter of livestock.

The first quarter of 2023 saw an increase in animal slaughter of 9%, with sheep slaughter increasing by 44%, while cattle, goats, and pigs all experienced declines of 33%, 68%, and 7%, respectively.

CONTINUED ON PG.11

CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED THE EXTRACTION OF SAND AND AGGREGATE FROM THE SEEIS RIVER, KHOMAS REGION

1. PROJECT SITE AND DESCRIPTION

Theopaldt Properties Two cc, intends to apply to obtain an Environmental Clearance Certificate for the proposed Extraction of Sand and Construction Aggregate from the Seeis River, Khomas Region. The key component of the proposed activity entails the extraction of sand and aggregate by front-end loader and transportation to a suitable processing site.

2. PUBLIC PARTICIPATION PROCESS

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input.

3. COMMENTS AND QUERIES

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **21 May 2023.**

3. COMMENTS AND QUERIES

Please register and direct all comments, queries to: Environ-Leap Consulting at Email: eap.trigen@gmail.com



≝Vill@ger 10

RESUME OF EAP

...a leap towards better environmental compliance.

PROFESSIONAL PROFILE

Mr. SHADRACK TJIRAMBA Research and Environmental Management Specialist

| ID Number : Country of Résidence : Nationality: | 80011910445 Namibia Namibian | EMAIL: Cell: | eap.trigen@gmail.com +264-816229933 |
|---|---|-----------------|--|
| PROFESSIONAL OVERVIEW | | | |
| Experience Internationally: | | | |
| Countries worked: | Namibia, South Africa. | | |
| Languages: | English (fluently written, spoken and read); Otjiherero (fluently spoken, written and read) Afrikaans (well spoken, fairly written and read), | | |
| ACADEMIC QUALIFICATIONS: | | | |

| 2009 The University Western | | Post-Graduate Diploma Sustainable Land Management (NQA Level | | |
|-----------------------------|------------------------------------|--|--|--|
| | Cape | 8) Sustainable Development, Resource Economics, 2009), South Africa | | |
| 2007 | University of South Africa (UNISA) | Bachelor of Laws (LLB) | | |
| 2005 | Polytechnic of Namibia | B-Tech Land Management, 2005 | | |

EMPLOYMENT RECORD:

May 2020-Current: Enviro-Leap Consulting Cc Position: Lead Consultant Environmental Management

- Compile and review environmental assessment reports (environmental scoping and management plans (EMP)) for our clients in accordance with the requirements of the Environmental Management Act, No.7 of 2007 and its regulations of 2012
- · Compile and review environmental policies and audits
- Reviewed and updated the Solid Waste Management Policy for Dundee Metals Mining
- · Conduct environmental compliance inspections and audits
- Facilitate stakeholder engagement
- Coordinate closure and rehabilitation of development projects, such as mining sites, hazardous substance spill sites
- Prepared training manuals and facilitated workshops for Communal Land Boards

August 2015 - July 2018 (fixed- term 3 years)

Position: Project Coordinator-Basket Fund, GIZ (Deutcshe Gesellschaft Fur Internationale) Responsibilities:

- Coordinate project activities in the Omaheke and Otjozondjupa Region's
- Provide technical expertise/advise to various regional councils, land boards, traditional authorities, local level planning committees
- Coordinate the processes of revising and developing the Namibian environmental legislations (plans, strategies, regulations and Act amendments), as well as dissemination of information on these tools
- Prepare tender documents
- Coordinate project procurement needs in line with GIZ procurement policies.
- Financial reporting in line with financial guidelines for grant agreement GIZ
- Coordinate, manage the planning and implementation of project consultants' key performance areas.
- Supervise project staff and resource allocation
- Reporting in line with donor requirements

🞯. O. Box 25874, Windhoek 🛛 🔕 +264 81 622 9933 🔘 eap.trigen@gmail.com

January 2019 - June 2019

Position: Social Policy Consultant - Gender Mainstreaming: Benguela Convention Commission. Responsibilities:

- Conducted and compiled a draft Situation Analysis Report, summarizing the findings of desk review, gender survey through the field mission and interviews
- Compiled a draft Action Plan for BCLME III Project and Gender Policy for BCC
- Hosted and facilitated a situation analysis findings validation workshop
- Produced final Situation Analysis Report, Gender Action Plan for BCLME III Project, including a proposed gender-responsive Project Results Framework with gender-responsible outputs, sex- disaggregated indicators, baseline and targets. Gender Policy for BCC

August 2011 to Dec 2012

Project Coordinator-MCA Agriculture & Environment:

- Managed the Millennium Challenge Accounts Namibia Agriculture and Environment project's activities.
- Co-Developed, implemented and monitored local-level integrated activities and annual work plans for the CBNRM.
- Undertook and provided training and technical support to the targeted conservancies as per the objectives
 of the CBNRM
- Ensured project compliance with donor requirements through production of and submission of technical reports according to Donor procedures trainings for land management for farmers

February 2004 - March 2009

Researcher: Land, Environment and Development Project-Legal Assistance Centre. June 2006 – November 2009

- Assist with desktop and field research on land, environmental and urban housing (informal settlements).
- Assist in the compilation of research questionnaires
- Conduct interviews
- Assist with project administration
- Laise with stakeholders NGO's, Government Agencies, Farmer's Associations, Ministry of Environment
- Draft research reports

CERTIFICATION

I, the undersigned, Shadrack Tjiramba, hereby certify to the best of my knowledge that the information provided herein correctly describe me, my qualifications and experience.

Date: Signature: