

ENVIRONMENTAL SCOPING AND IMPACT ASSESSMENT

FOR THE PROPOSED DOLOSTONE
INDUSTRIAL MINERAL SMALL-SCALE
MINING/QUARRYING ACTIVITIES WITHIN
MINING CLAIMS 72090,72091 & 72109

NEAR OMAKANGE

Omusati Region



DOCUMENT INFORMATION

Title	Environmental Scoping and Impact Assessment (EIA) for the proposed dolostone industrial mineral small-scale mining/quarrying activities within Mining Claims (MCs) 72090,72091 & 72109 in the Omusati Region, Namibia
Author	Lovisa N Amwele
Client	Mr. Martin Demufawo Shaanika
Authorizer	Ministry of Environment Forestry and Tourism (MEFT)
Internal Doc Name	221211-MDS2-EIA-V04-LNA
Cite this document as:	Amwele, L.N., 2022. Environmental Scoping and Impact Assessment (EIA) for the proposed dolostone industrial mineral small-scale mining/quarrying activities within Mining Claims (MCs) 72090,72091 & 72109 in the Omusati Region, Namibia
Copyright	2022 Alliance Environmental Consultancy. All right reserved.

DOCUMENT APPROVAL

Role	Name	Signature	Date
Author	Lydia Kapolo	LK	11.21.2022
Reviewer	Lovisa N Amwele	LNA	12.12.2022
Client			

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	8
1. INTRODUCTION.....	11
1.1. PROJECT LOCALITY	11
1.2. PURPOSE OF THE DOCUMENT.....	14
1.3. TERMS OF REFERENCE	15
1.3.1. SCREENING & SCOPING	15
1.3.2. LEGAL FRAMEWORK	15
1.3.3. AIM OF THE REPORT	15
1.3.4. PUBLIC PARTICIPATION PROCESS	15
1.3.5. ENVIRONMENT DESCRIPTION.....	16
1.3.6. IMPACT ASSESSMENT.....	16
1.3.7. ENVIROMENTAL MANAGEMENT PLANNING (EMP)	16
1.4. PROJECT MOTIVATION/RATIONALE.....	17
1.5. PROJECT LIMITATIONS	17
1.6. THE ENVIRONMENTAL CONSULTANT	18
2. EIA APPROACH AND METHODOLOGY	19
3. PROJECT DESCRIPTION.....	22
3.1. ABOUT DOLOSTONE.....	22
3.2. PROJECT PLAN AND ACTIVITIES	22
3.2.1. PLANNING PHASE ACTIVITIES	22
3.2.2. CONSTRUCTION PHASE ACTIVITIES	23
3.2.3. OPERATIONAL PHASE ACTIVITIES	24
3.2.4. DECOMMISSIONING AND FINAL REHABILITATION	26
3.2.5. ACCESS AND TRANSPORT	27
3.2.6. RESOURCES (WATER AND ELECTRICITY)	27
3.2.7. ACCOMODATION AND SUPPORTING INFRASTRCTURE	28
4. LEGAL REQUIREMENTS.....	29
4.1. LIST OF APPLICABLE LAWS AND LEGISLATIONS	29
4.2. KEY REGULATORS / COMPETENT AUTHORITIES.....	34
4.3. PERMITS.....	34
5. ALTERNATIVES CONSIDERED	35
6. BASELINE ENVIRONMENT/ STUDY AREA	37
6.1. CLIMATE.....	37
6.1.1. TEMPERATURE.....	37
6.1.2. RAINFALL.....	38
6.1.3. CLOUD COVER.....	39
6.1.4. SUNSHINE AND WIND.....	39
6.2. BIOPHYSICAL ENVIRONMENT	40
6.2.1. FLORA.....	40
6.2.2. FAUNA.....	42
6.3. SOIL.....	43

6.4. GEOLOGY 44

6.5. HYDROLOGY 47

6.6. SOCIO-ECONOMIC SETTING 49

 6.6.1. REGIONAL AND LOCAL PROFILE..... 49

 6.6.2. ARCHAEOLOGICAL AND HERITAGE 50

7. STAKEHOLDER ENGAGEMENT 51

7.1. PUBLIC PARTICIPATION 51

 7.1.1. ADVERTS 51

 7.1.2. SITE NOTICE AND VISIT 51

 7.1.3. STAKEHOLDER ENGAGEMENT 52

8. EVALUATION OF IMPACTS 53

8.1. ASSESSMENT PROCEDURE..... 53

9. IMPACTS ASSESSMENT..... 59

10. DECOMMISSIONING AND REHABILITATION 79

 10.1. SITE REHABILITATION 79

 10.2. PLANNING FOR REHABILITATION 79

APPENDIX A – ENVIRONMENTAL CONSULTANTS CV 83

APPENDIX B – ENVIRONMENTAL MANAGEMENT PLAN (EMP) 92

APPENDIX C – BACKGROUND INFORMATION DOCUMENT 93

APPENDIX D – ADVERTS, SITE NOTICES, STAKEHOLDER LIST/ATTENDENCE REGISTERS AND MEETING MINUTES107

TABLE OF FIGURES

FIGURE 1 - LOCALITY DISPLAY ON THE MINING CADASTRE PORTAL (MME,2022) HTTPS://PORTALS.LANDFOLIO.COM/NAMIBIA/.....	12
FIGURE 2 – LOCALITY MAP AND INFRASTRUCTURE OF THE PROPOSED PROJECT	13
FIGURE 3 - EIA FLOW CHART BY AEC.....	21
FIGURE 4 - PROCESS FLOW FOR THE PRODUCTION OF DOLOSTONE AGGREGATES	26
FIGURE 5 - ACCESS ROUTES TO THE SITE.....	27
FIGURE 6 - AVERAGE HIGH AND LOW TEMPERATURE FOR OPUWO (WWW.WORLDDWERATHEONLINE.COM)	37
FIGURE 7 – AVERAGE RAINFALL IN OPUWO (www.worldweratheonline.com)	38
FIGURE 8 - WINDROSE FOR SESFONTEIN NOVEMBER 2010 TO SEPTEMBER 2018 (A Iowa weather, 2022)	39
FIGURE 9 -VEGETATION COVER OF THE SURROUNDING AREA.....	41
FIGURE 10 - DOMINANT SOIL AROUND THE STUDY AREA	44
FIGURE 11 - GEOLOGY OF THE SURROUNDING AREAS.	46
FIGURE 12 - HYDROLOGY SETTING OF THE SURROUNDING AREA.....	48
FIGURE 13 - SITE NOTICES PLACED AT THE OMAKANGE CONSERVANCY HALL	51
FIGURE 14 - PUBLIC MEETING AND INFORMATION SHARING IN SESSION UUKWALUUNDHI CONSERVANCY OFFICE HALL, OMAKANGE VILLAGE.	52

LIST OF TABLES

TABLE 1 - CORNER COORDINATES FOR THE MINING CLAIMS	12
TABLE 2 - LIST OF APPLICABLE LAWS AND LEGISLATIONS.....	29
TABLE 3 - INTERNATIONAL LAW TO WHICH NAMIBIA IS A SIGNATORY	33
TABLE 4 - AGENCIES REGULATING ENVIRONMENTAL PROTECTION IN NAMIBIA.	34
TABLE 5 - APPLICABLE PERMITS TO THE PROPOSED PROJECT	34
TABLE 6 - FLORA DATA FOR THE AREA	40
TABLE 7 - ECOLOGICAL IMPACT ASSESSMENT TABLE.....	59
TABLE 8 - NOISE IMPACT ASSESSMENT TABLE	62
TABLE 9 - DUST IMPACT ASSESSMENT TABLE	66
TABLE 10 - WASTE IMPACT ASSESSMENT TABLE	69
TABLE 11 - VISUAL IMPACT ASSESSMENT TABLE.....	73
TABLE 12 - HERITAGE IMPACT ASSESSMENT TABLE.....	75
TABLE 13 – LANDUSE IMPACT ASSESSMENT TABLE	76
TABLE 14 - SOCIO ECONOMIC IMPACT ASSESSMENT TABLE	78

NON-TECHNICAL SUMMARY

Alliance Environmental Consultancy CC (AEC) (herein referred to as the consultant) has been appointed by Mr. Martin Demufawo Shaanika (herein referred to as the proponent) to act on their behalf in obtaining an Environmental Clearance Certificate (ECC) for the proposed small scale mining activities within Mining Claims (MCs) 72090,72091 and 72109. The project area is located approximately 7km Northeast of Omakange settlement which is north of Namibia. The site is accessible via existing small roads and tracks from the C41 road from Omakange. The claims cover approximately an area of 48.34 hectares in total.

In terms of the Environmental Management Act No.7 of 2007 and the Environmental Impact Assessment (EIA) Regulations of 2012, the project triggers listed activities that cannot be undertaken without an Environmental Clearance Certificate (ECC). An environmental clearance application will be submitted to the Ministry of Mines and Energy (MME) and the Ministry of Environmental, Forestry, and Tourism (MEFT) for approval before the commencement of the anticipated project activities.

The activities entail the development of small-scale mining activities to extract industrial mineral dolostone aggregates. Dolostone aggregates are used in the construction of roads, bridges, buildings and canals etc. The proposed quarry will extract dolostone that will be crushed in a crusher plant on site and the stone products transported to various customers in the construction industry locally and internationally. Small-scale mining activities include a desktop review of existing data as well as past area studies. This is conducted to understand the commodities in the area for extraction. This can be done by purchasing high-resolution data from the Government and interpreting it as part of the initial mineral study. Small-scale mining is classified as such because of the setup, equipment and machinery used. Traditional methods of drilling, blasting, excavation and crushing techniques shall be conducted.

This Scoping Report has been compiled in support of an application for an Environmental Clearance Certificate and it includes an Environmental Impact Assessment section. This scoping report describes the bio-physical and socio-economic environment, legal requirements and it also documents the stakeholder engagement Mitigation and enhancement measures which have been identified during the compilation of this report are carried forward into an Environmental Management Plan (EMP) which is bound to this report. The results of this scoping assessment were considered satisfactory and concluded that no further detailed assessment was necessary unless.

The public was informed via the newspapers; site/public notices placed around accessible places near the project area including relevant local offices notice boards. One-on-one interaction (public meetings) were held with the public. The interested and affected parties raised their comments and

concerns on the proposed project activities. The concerns and comments received from the public and the local community members formed the basis for this report as well as the Draft EMP.

The identification of potential impacts included impacts that may occur during the planning, construction, operational and decommissioning phases of the project. The assessment of impacts includes direct, indirect as well as cumulative impacts. In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed projects is well understood so that the impacts associated with the projects can be assessed and the mitigations as detailed in the EMP Report (Appendix B) are implemented and monitored by the Proponent.

The following potential impacts on the environment during mining activities have been identified:

- Dust & Noise
- Health & Safety
- Visual
- Ecological
- Groundwater and surface water
- Heritage & Socio-Economic

The benefits that could arise from the project are:

- It will create additional employment in the area.
- The project will generate export and foreign exchange earnings.
- It will contribute locally to employment opportunities for both locals and contractors.
- Skills transfer and training would develop the local workforce during both the construction and operational phases.

Due to the limited scope of the proposed activities and the use of a step-by-step approach in advancing mining operations, the overall severity of potential environmental impacts of the proposed project activities on the receiving environment will be of medium to high magnitude, temporally and permanent duration, localized extent, and high probability of occurrence. All impacts are provided with mitigation measures, minimized or avoided to acceptable degrees provided that the measures are put into consideration

Based on the conclusions of this EIA Report, it is thus recommended that an Environmental Clearance Certificate be provided for the planned project activities. When implementing the proposed program, the Proponent shall consider the following critical requirements:

- Where applicable, the Proponent will negotiate Access Agreements with landowners/authorities.
- The Proponent is responsible for obtaining all additional permits that may be required.

- In accordance with all applicable national rules, the Proponent shall comply with all terms of the EMP and conditions of the Access Agreement to be signed into between the Proponent and the landowner/s.
- In cases where baseline information, national or international guidelines, or mitigation measures have not been supplied or do not adequately address the site-specific project effect, the Proponent must use the precautionary approach/principles.

LIST OF ABBREVIATIONS

AEC	Alliance Environmental Consultancy
BID	Background information Document
CV	Curriculum Vitae
°C	Degree Celsius
DEA	Directorate of Environmental Affairs
EA	Environmental Assessment
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act No 7 of 2007
EMP	Environmental Management Plan
H&S	Health & Safety
IAPs	Interested and Affected Parties
IUCN	International Union for Conservation of Nature
km	Kilometers
MAP	Mean annual precipitation
MAWLR	Ministry of Agriculture, Water and Land Reform
MC	Mining Claim
MEFT	Ministry of Environment Forestry and Tourism
MME	Ministry of Mines and Energy
MSDS	Material Safety Data Sheet
PPP	Public Participation Process
TA	Traditional Authority
UNCCD	United Nations Convention to Combat Desertification

GLOSSARY OF TERMS

Alternatives	A possible course of action, in place of another, that would meet the same purpose and need but which would avoid or minimize negative impacts or enhance project benefits. These can include alternative locations/sites, routes, layouts, processes, designs, schedules and/or inputs. The “no-go” alternative constitutes the ‘without project’ option and provides a benchmark against which to evaluate changes; development should result in net benefit to society and should avoid undesirable negative impacts.
Competent Authority	A body or person empowered under the local authorities act or Environmental Management Act to enforce the rule of law.
Environment	As defined in the Environmental Assessment Policy and Environmental Management Act - “land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, palaeontological or social values”.
Environmental Assessment (EA)	Process of assessment of the effects of a development on the environment.
Environmental Management Plan (EMP)	A working document on environmental and socio-economic mitigation measures, which must be implemented by several responsible parties during all the phases of the proposed project.
Evaluation	The process of ascertaining the relative importance or significance of information, the light of people’s values, preference and judgements in order to make a decision.
Hazard	Anything that has the potential to cause damage to life, property and/or the environment. The hazard of a particular material or installation is constant; that is, it would present the same hazard wherever it was present.
Interested and Affected Party (IAP)	Any person, group of persons or organisation interested in, or affected by an activity; and any organ of state that may have jurisdiction over any aspect of the activity.
Mitigate	The implementation of practical measures to reduce adverse impacts.

Proponent (Applicant)	Any person who has submitted or intends to submit an application for an authorisation, as legislated by the Environmental Management Act no. 7 of 2007, to undertake an activity or activities identified as a listed activity or listed activities; or in any other notice published by the Minister or Ministry of Environment & Tourism.
Public	Citizens who have diverse cultural, educational, political and socio-economic characteristics. The public is not a homogeneous and unified group of people with a set of agreed common interests and aims. There is no single public. There are a number of publics, some of whom may emerge at any time during the process depending on their particular concerns and the issues involved.
Scoping Process	Process of identifying: issues that will be relevant for consideration of the application; the potential environmental impacts of the proposed activity; and alternatives to the proposed activity that are feasible and reasonable.
Significant Effect/Impact	An impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.
Stakeholder Engagement	The process of engagement between stakeholders (the proponent, authorities and IAPs) during the planning, assessment, implementation and/or management of proposals or activities. The level of stakeholder engagement varies depending on the nature of the proposal or activity as well as the level of commitment by stakeholders to the process. Stakeholder engagement can therefore be described by a spectrum or continuum of increasing levels of engagement in the decision-making process. The term is considered to be more appropriate than the term "public participation".
Stakeholders	A sub-group of the public whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. The term therefore includes the proponent, authorities (both the lead authority and other authorities) and all interested and affected parties (I&APs). The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered stakeholders.

1. INTRODUCTION

Alliance Environmental Consultancy CC (AEC) has been appointed by Mr. Martin Demufawo Shaanika to act on their behalf in obtaining an Environmental Clearance Certificate (ECC) for the proposed small scale mining activities within Mining Claims (MCs) 72090,72091 and 72109. The mining activities will be assessed in this report and an Environmental Management Plan will be provided (Appendix B).

No specialist survey of the physical, chemical and biological characteristics of the actual site and surroundings were done. However, a number of studies have been completed for other projects within the vicinity surrounding areas. Though not a site-specific baseline study as such, this report represents a reference point for comparing any current and future data collected. This will be the subject of the section on monitoring recommendations.

1.1. PROJECT LOCALITY

The project area is located approximately 7km Northeast of Omakange settlement which is north of Namibia. The site is accessible via existing small roads and tracks from the C41 road from Omakange. The claims cover approximately an area of 48.34 hectares in total. FIGURE 2 shows the locality of the area.

The claims lie within the Uukwaliidhi communal conservancy which fall under the Ruacana constituency. The people living in the area are led by headmen who in turn grant stewardship and authority to junior headmen. Figure 2 renders a map of the mining claim relative to the nearest communities of Okeendjibi, Okakango and Okumumba.

The mining claims are under the ownership of Mr. Martin Demufawo Shaanika who pegged the area through the Ministry of Mines and Energy (MME) on 12 August 2020. The mining claims are still at the application stage (pending approval) as it is subject to an environmental clearance certificate (ECC) by the Ministry of Environment, Forestry and Tourism (MEFT) which is the reason for conducting this environmental scoping and impact assessment.

The figure 1 below shows the locality of the mining claims as displayed on the Namibia Mining Cadastral Portal on this link <https://portals.landfolio.com/namibia/>. The corner coordinates of the claims are provided in the table below.

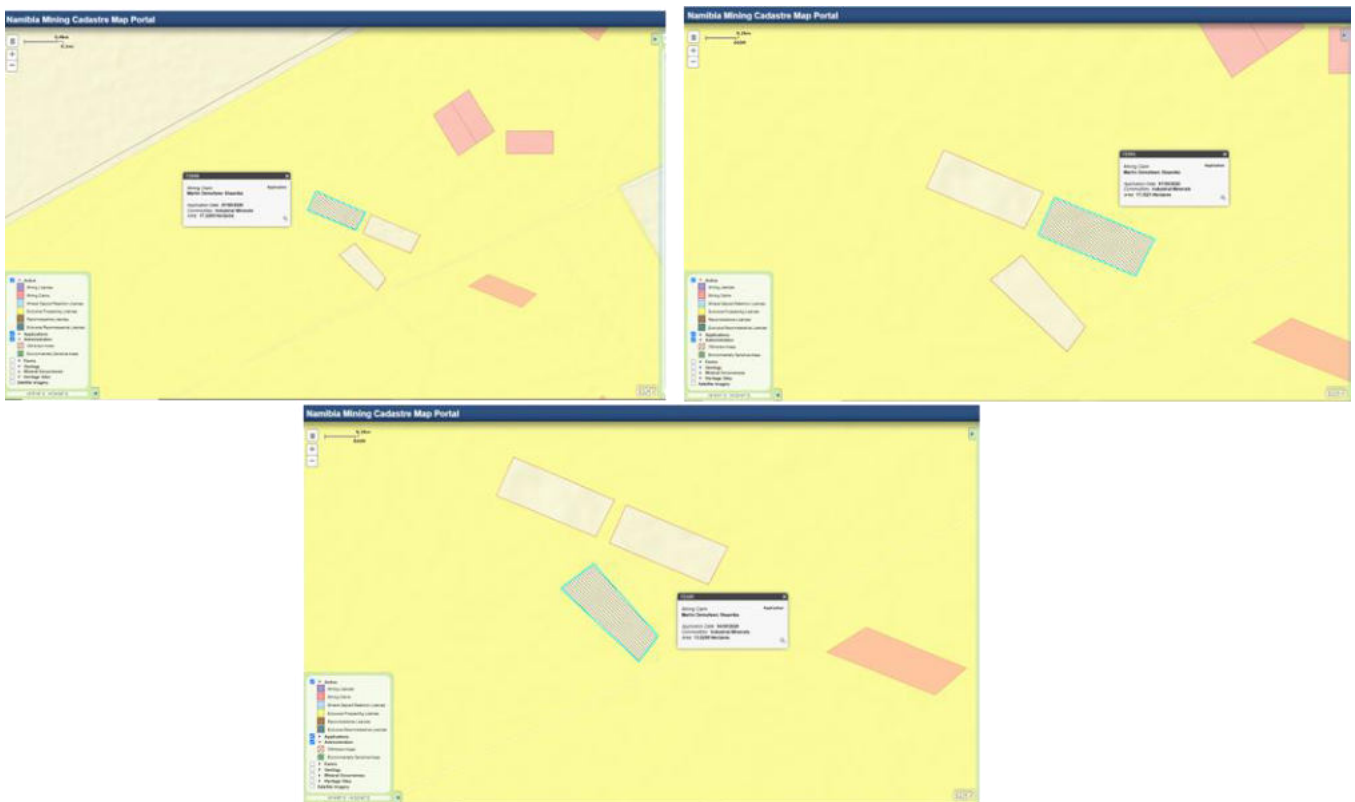


FIGURE 1 - LOCALITY DISPLAY ON THE MINING CADASTRE PORTAL (MME,2022)
[HTTPS://PORTALS.LANDFOLIO.COM/NAMIBIA/](https://portals.landfolio.com/namibia/).

TABLE 1 - CORNER COORDINATES FOR THE MINING CLAIMS

	LATITUDE	LONGITUDE
MC - 72090	-18.071031	14.388367
	-18.068746	14.382570
	-18.066611	14.383582
	-18.068997	14.389500
MC - 72091	-18.073684	14.394964
	-18.07138	14.38917
	-18.069259	14.390158
	-18.071602	14.396091
MC - 72109	-18.077944	14.390912
	-18.073888	14.386342
	-18.072532	14.388255
	-18.076543	14.392011

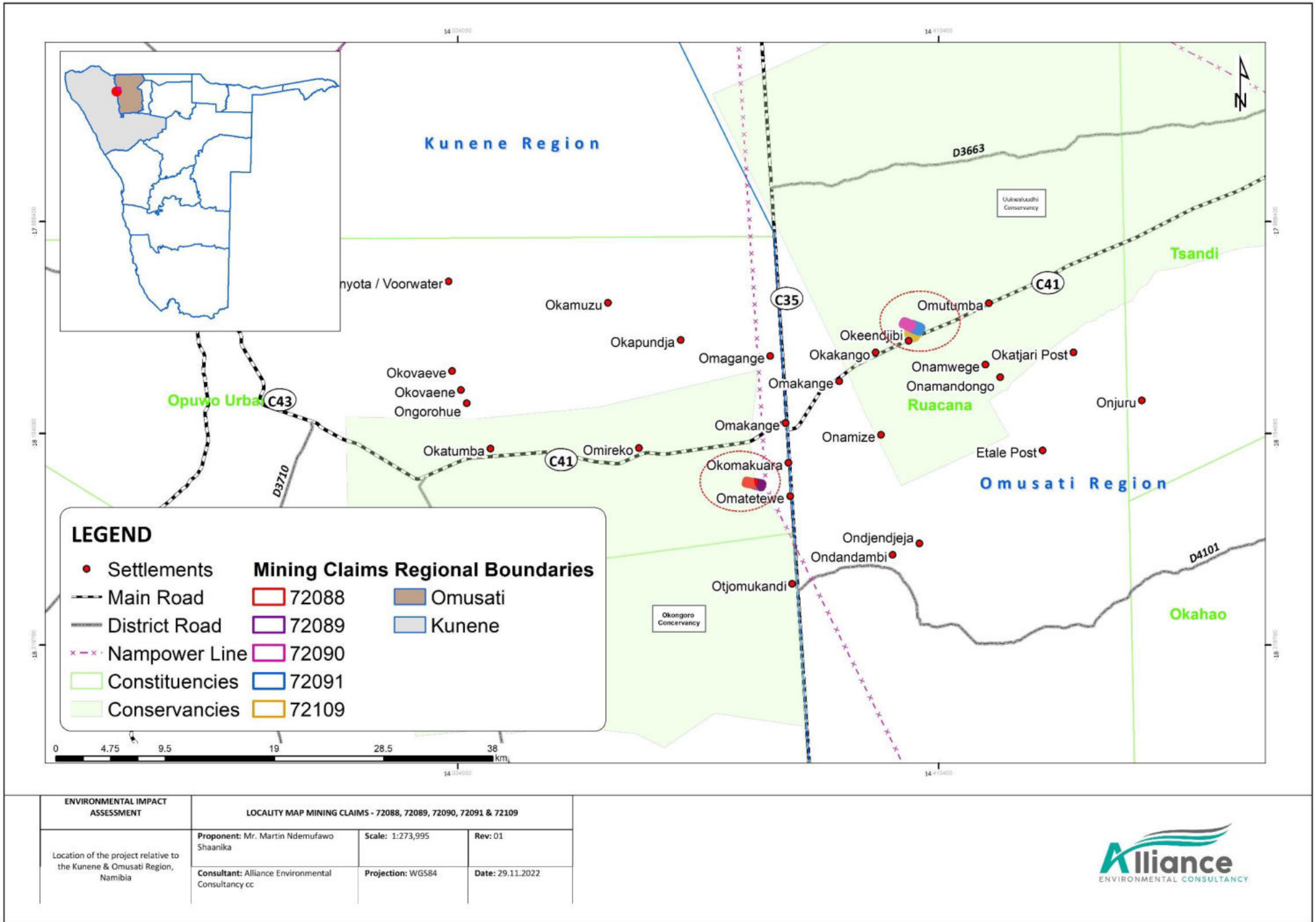


FIGURE 2 – LOCALITY MAP AND INFRASTRUCTURE OF THE PROPOSED PROJECT

1.2. PURPOSE OF THE DOCUMENT

In terms of the Environmental Management Act No.7 of 2007 and the Environmental Impact Assessment (EIA) Regulations of 2012, the project triggers listed activities that cannot be undertaken without an Environmental Clearance Certificate (ECC). An environmental clearance application will be submitted to the Ministry of Mines and Energy (MME) as the competent authority and the Ministry of Environment, Forestry, and Tourism (MEFT) as the issuing authority of the decision made before the commencement of the anticipated project activities

The environmental scoping assessment report aims to address the following:

- i. Identification of potential positive and negative environmental impacts.
- ii. Evaluation of the nature and extent of potential environmental impacts
- iii. Identify a range of management actions that could mitigate the potential adverse impacts to required levels.
- iv. Consult relevant stakeholders regarding the proposed development.
- v. Provide sufficient information to the Ministry of Environment, Forestry and Tourism to make an informed decision regarding the proposed project.

The provision of the listed activities are as follows:

MINING AND QUARRYING ACTIVITIES

3.1 The construction of facilities for any process or activities which requires a license, right, or other forms of authorization, and the renewal of a license, right, or any other form of authorization in terms of Minerals (Prospecting and Mining Act), 1992.

3.2 Other forms of mining or extraction of natural resources whether regulated by law or not.

3.3 Resource extraction, manipulation, conservation, and related activities.

FORESTRY ACTIVITIES

4.1 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.

HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE

9.1 The manufacturing, storage, handling, or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974.

1.3. TERMS OF REFERENCE

The Terms of Reference for the proposed project is based on the requirements set out by the Environmental Management Act (EMA) (2007) and its EA Regulations (2012). The scope of this assessment is to identify and evaluate potential environmental impacts emanating from the proposed activity. Data has been compiled by making use of literature, the information provided by the proponent, and from the site visit.

The process covered the following steps, as divided into the sections below. Each section describes what was undertaken.

1.3.1. SCREENING & SCOPING

The scope of the study was finalized after various conversations with the proponent, site visit by the subcontractors who carried out the Public Participation Process who also confirmed the terrain and biophysical characteristics of the site.

1.3.2. LEGAL FRAMEWORK

All legislation, policies and guidelines that had reference to the proposed project were listed. The activities for which clearance is required for the project were extracted from the EMA Regulations. As per legal requirements, any quarrying activity requires the Environmental Commissioner within the Ministry of Environment & Tourism to render an Environmental Clearance Certificate (ECC) in terms of the Environmental Management Act, No 7 of 2007 (EMA).

1.3.3. AIM OF THE REPORT

The aim of this report is to provide details on the proposed construction, operational, decommissioning and closure activities that will enable decision makers to make informed decisions regarding the development from an environmental perspective.

1.3.4. PUBLIC PARTICIPATION PROCESS

Inform Interested and Affected Parties (I&APs) and relevant authorities of the details of the proposed development and provide them with a reasonable opportunity to participate during the process

Stakeholder engagement through the Public Consultation Process, is described in a later section of this report and resulted in not only information about the community and its economic activities, but also provided insightful concerns regarding the potential impacts on the environment for the envisaged project development. Comments and concerns as obtained through discussions, and focus group meetings provided a community perspective towards the proposed development as well as generated information regarding the surrounding land use.

Public meetings with the local communities took place on the 19th of November 2022. The meeting minutes are contained in Appendix D.

1.3.5. ENVIRONMENT DESCRIPTION

The 'environment' is defined in the Environmental Assessment Policy and Environmental Management Act as "land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, paleontological or social values".

Relevant environmental data was compiled by making use of primary information from site visits, secondary data and stakeholder consultation. The report identified existing environmental (both ecological and socio-economic) conditions of the receiving environment in order to determine environmental sensitivities. Information regarding the biophysical and socio-cultural environment was sourced from a number of studies previously done in and around the study area. Socio cultural aspects are supplemented by various planning documents. Please refer to the document reference list for the sources of information consulted.

1.3.6. IMPACT ASSESSMENT

The scoping and assessment process aims to guide and promote sustainable and responsible development and not to discourage development. Project components which present unacceptable or very high impact ratings have been highlighted and possible alternatives or measures suggested. Potential environmental impacts and associated social impacts were identified and addressed in the report. The EAP has assessed all likely positive and negative impacts environmental and social impacts at the local and regional (Omusati Region) and national (Namibia) levels using the Hacking Assessment Method.

Possible enhancement measures have been listed for those positive impacts while prevention, mitigation and rehabilitation measures have been provided for negative impacts. The environmental assessment was conducted to comply with Namibia's Environmental Management Act, the requirements of Local Authorities and all other legal requirements applicable to the development and Namibia. The assessment process involved merging of various information streams into a description of the environment and the proposed project. If the environmental commissioner finds that the assessment of potential impacts and the proposed mitigation measures proposed in this report, are acceptable, an ECC may be awarded.

1.3.7. ENVIROMENTAL MANAGEMENT PLANNING (EMP)

This task involved the drafting of a standalone document that outlined the management, monitoring and mitigation measures that will avoid, minimise and/or mitigate potentially negative impacts. In some case remediation and rehabilitation will be required. The ECC should refer to the EMP, and the conditions stipulated therein, thus rendering the EMP a legally binding document to which the proponent must adhere.

1.4. PROJECT MOTIVATION/RATIONALE

Mining activities in Namibia is the biggest contributor to the country's revenue and one of the largest economic sectors in the country. Although for small scale activities there are limited social benefits associated with the project, the following are the possible benefits of the proposed project activities:

- Contributions to annual license fees to the government through the Ministry of Mines and Energy (MME).
- Payments of lease agreements and services rendered.
- Inducement of additional investments
- Value adding to Namibian raw materials
- Provisional contracting opportunity for companies interested in mineral explorations are carried out throughout the mineral prospecting phase, which might take several years.
- Provision of contractual employment opportunities.
- Increase in knowledge on the subsurface which then contributes to development, and geoscience research.
- Secure and reliable supply of raw materials for the especially for the construction industry.
- Contribute to the socio-economic development of the local area and region,
- Direct capital investment into Omusati Region

1.5. PROJECT LIMITATIONS

AEC assumes that all information and technical data for the Project relevant to the scope of the environmental scoping procedure provided by the Proponent are true and correct, and that all Necessary information has been disclosed.

This report is compiled as a scoping assessment and no other specialist studies were done as part of this assessment. This is because the consultants believed that the (small) magnitude of the proposed activities and the existence of similar projects in the vicinity can be used to sufficiently address these potential impacts from the proposed project under the impact assessment section of the ESIA Report and mitigation measures provided accordingly. Reviewed literature within the site baseline, community contributions, site observations, and professional experience from similar studies in Omusati and elsewhere were also considered when addressing these effects. The project specific information

used in this document is as provided by the Proponent, Site observations, consultants experience and relevant literature reviewed/research.

1.6. THE ENVIRONMENTAL CONSULTANT

Alliance Environmental Consultancy CC (AEC) (hereinafter referred to as consultant) is an independent consultant developed to assist clients to meet environmental legislative requirements, relevant standards and uphold environmental safety throughout project developments and operation. We assess and monitor the social and environmental impacts of projects related to biomass, mining, energy, tourism, and other sectors. Our wide range of capabilities, disciplines, and services are fundamentally based on proactively delivering advice and solutions with the outlook of sustainability. This is done by awarding our clients the responsibility and opportunity to make unique differences in their industries. The consultant was assisted by Ms. Lydia Kapolo who is an intern. The detailed CV of the team is presented in Appendix A.

AEC is in no way a direct affiliate of the applicant and has no personal or financial interest in the proposed project other than reasonable compensation for the professional services provided.

2. EIA APPROACH AND METHODOLOGY

The EIA and EMP methodology applied for this project will take into account the provisions of the Environmental Impact Assessment (EIA) Regulations, 2012, and the Environmental Management Act (EMA) Act No. 7 of 2007. The process followed is detailed below and in FIGURE 3.

PHASE 1 – ENVIRONMENTAL SCREENING

Project initiation and registration with the Competent Authority

- This involves meeting with the client and discussing timeframes, logistics and project descriptions.
- Basic desktop site Baseline analysis and compilation of a Background Information Document (BID)
- Project registration with Department of Environmental Affairs (DEA) to be done on the EIA online portal system.
- After the project is registered, the environmental Commissioner will advise whether a full EIA or Scoping assessment is required for the project.

PHASE 2: ENVIRONMENTAL SCOPING ASSESSMENT INCLUDING PUBLIC PARTICIPATION PROCESS (PPP)

- An extensive desktop baseline study and review for the area will be undertaken using remote sensing to identify and describe potential sites that are likely to be impacted by the project before on ground site verification.
- The consultants will conduct a site visit during this stage to form a basis for the assessment and determine the real sensitivity of the surrounding biophysical and socio-economic environment.
- The information obtained during the site visit will be supplemented by a literature review and will be used by the environmental consultant to: (a) Determine the actual/real risks associated with the project activities, (b) Provide practical mitigation measures to minimize the risks; and (c) Make recommendations for further studies, should it be required.

Public Consultation Process and stakeholder engagement (21 Days)

- Public consultation is an important stage of the EIA process as it ensures full consultation and public involvement. The public consultation process begins with usually newspaper advertisement (Minimum two (2) local newspapers twice for two consecutive weeks), site notices to be placed and easily accessible places around the project area/town, radio announcements, when necessary, through respective constituency offices (especially in remote areas where newspapers might not reach on time) and then public meetings. This is done to provide the public a chance of getting involved in the process, provide their views and input regarding to the proposed activities in the area.

- During this stage, potential stakeholders (local governments, constituency offices, farmers etc.) are identified and made aware of the project. All Interested and Affected Parties (I&APs) contact details will be collected for future communications related to the project progress.
- The Background Information Document (BID) prepared in phase 1 will be shared with all identified and registered I&APs during this period. The BID usually contains summarized project information such as the project description of activities, project motivation, potential impacts, and EIA process followed. This document will be shared via emails or delivered in hardcopy to the relevant/applicable parties. Other social media platforms such as WhatsApp will also be utilized in this case.
- All comments, inputs, issues and/ or concerns raised by I&APs during the process will be recorded for consideration in the environmental assessment report and development of the EMP.

PHASE 3: ENVIRONMENTAL REPORTING – ENVIRONMENTAL SCOPING ASSESSMENT REPORT (ESAR) AND ENVIRONMENTAL MANAGEMENT PLAN (EMP)

- This stage will include data reduction and analysis using appropriate techniques to produce suitable project results for interpretation and discussion. This stage will entail consolidation of the findings in the form of a report that can be presented to the client for review and comments. An EMP will be drafted to mitigate and manage all impacts identified in the scoping report.
- After approval of the documents by the Client, the draft ESAR and EMP will be prepared for circulation to the public (I&APs) for comments over a period of 7 days.
- All comments are consolidated and included in the reports and the ESAR and EMP are finalized for submission to the competent authority (Ministry of Mines and Energy) and issuing authority (MEFT).
- The registered and identified I&APs will be informed that the final documents have been submitted to the authorities for decision making and that for any further comments, they can directly contact the DEA. Furthermore, the DEA provides another 14 days period for public participation on the online portal in this regard.

PHASE 4: FOLLOW-UP WITH THE COMPETENT AUTHORITY UNTIL FEEDBACK IS GRANTED

FIGURE 5: BELOW PROVIDES A SIMPLIFIED EIA PROCESS FLOWCHART

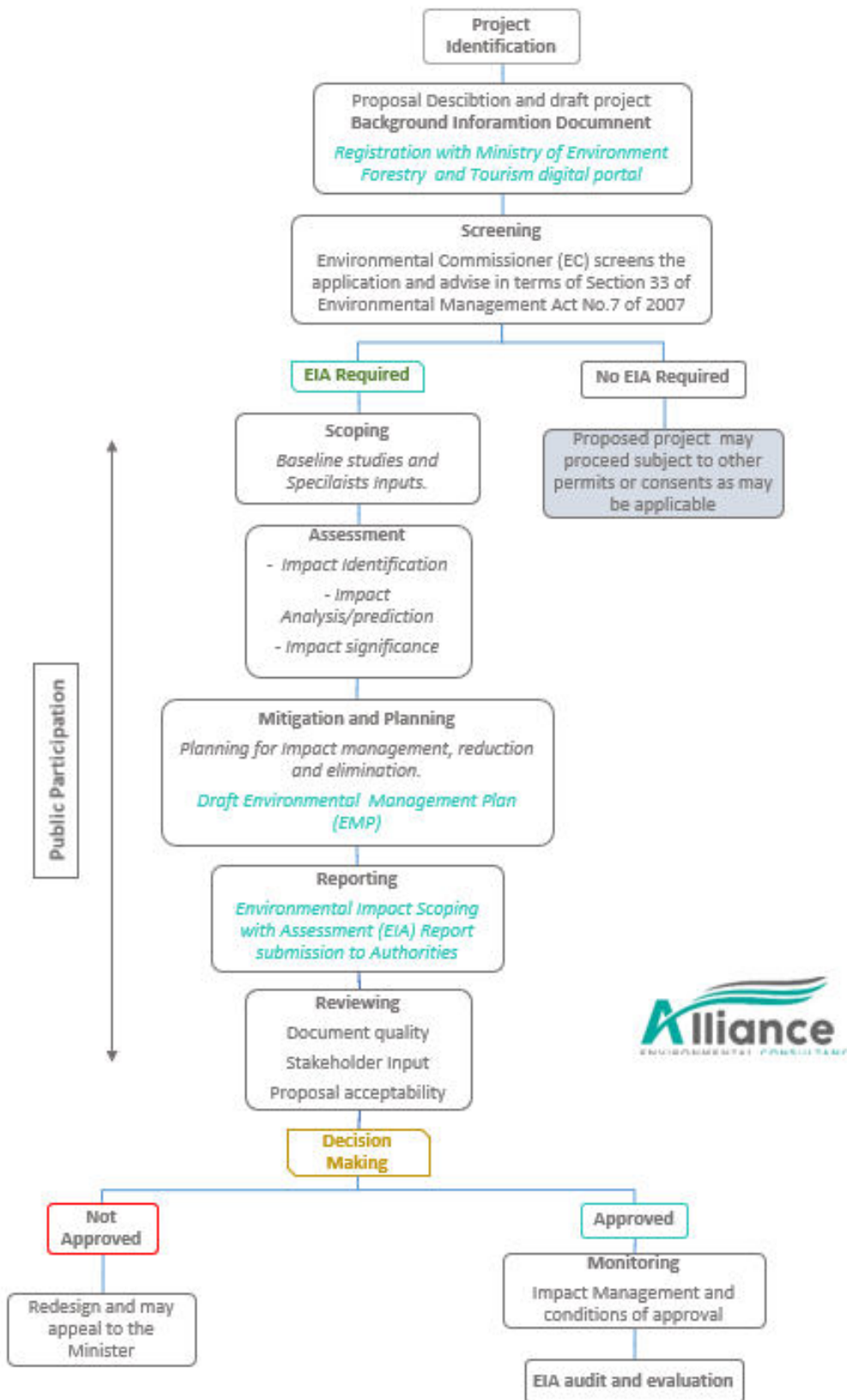


FIGURE 3 - EIA FLOW CHART BY AEC

3. PROJECT DESCRIPTION

3.1. ABOUT DOLOSTONE

Dolostone is commonly referred to by its mineral name, dolomite which is a form of calcium carbonate with chemical composition $(CaMg(CO_3)_2)$. Pure dolomite contains 54.28 percent calcium carbonate and 45.72 percent magnesium carbonate. It is a sedimentary rock that occur as thin to massive beds of fine- to coarse-grained rock. The color is typically some shade of gray, but may be white, tan, yellow, pink, purple, reddish brown, brown, or black other elements and impurities. Dolomite has a wide range of uses in the industry of construction, steel making, glass, ceramics, agriculture, etc. Therefore, the objective of the project is to engage successfully in the business of aggregate stone quarry and be able to boost the local economic activities through employment, business linkages and provision of affordable rock materials for use in the construction sector.

3.2. PROJECT PLAN AND ACTIVITIES

Operations are currently in the Planning Phase for the quarry and associated operations. This phase will aim at finalizing designs, agreements and permissions which are all related to the development of the quarry and processing infrastructure. The quarry and accessory works area are planned to be developed and operated simultaneously with the Construction Phase commencing upon receipt of the ECC should it be granted and secure funding. During this phase, all infrastructure required for operations will be established on site. All construction activities are planned to be completed within 12 months from initiation.

Once operational, the life of mine of the quarry is absolutely dependent on the demand requirements and capability of meeting such demands. However, in terms of feasibility some timeframe may be estimated based on expected demand requirements. The current estimate for the life of mine of the quarry is 10 - 17 years. Rehabilitation during the Decommissioning Phase is crucial for all proposed operations. It will mainly focus on making excavated areas safe by re-shaping the pit walls. Quarry operations will include blasting, crushing, milling and bagging together with the subsequent stockpiling for haulage.

3.2.1. PLANNING PHASE ACTIVITIES

This will incorporate the procurement of all required permits and of the mining/operational plans for the quarry and processing of the product. Contractual agreements such as the appointment of sub-contractors especially mine engineers and surveyors are dealt with in the latter part of the planning phase. Various state and parastatal agencies will be engaged regarding the various project component and permitting. These discussions will result in various agreements. Agencies that will be/are being consulted include the following:

- Ministry of Mines and Energy (MME)
- Ministry of Environment Forestry & Tourism (MEFT, this application)
- Omusati Regional Council
- NamWater
- Ministry of Agriculture, Water & Land Reform (MAWLR)
- Ministry of Lands Resettlement and Rehabilitation (MLRR)

Furthermore, Small-scale mining activities include a desktop review of existing data as well as past area studies. This is conducted to understand the commodities in the area for extraction. This can be done by purchasing high-resolution data from the Government and interpreting it as part of the initial mineral study. Regional reconnaissance assessment, which includes field-based activities such as regional mapping and sampling in order to identify and validate prospective targeted areas identified during stage 1.

Initial field-based activities such as widely distributed geological mapping, sampling, surveying, and maybe widely spaced trenching and drilling. Thereafter, detailed local field-based operations such as localized site-specific detailed geology mapping, trenching, bulk sample and surveying are carried out. When explorations and planning yields positive results, the construction phase follows and operations thereafter.

3.2.2. CONSTRUCTION PHASE ACTIVITIES

This will aim at establishing new infrastructure to accommodate the operational activities of the quarry and material processing like the crusher and screening plant (with a capacity of approximately 50 000 cubic meters per day) . An accessory works area will provide the ground and Licence for the establishment of a works yard. This area will be demarcated so as to limit the movement of equipment and personnel beyond the footprint of the quarry and accessory works area, and also to limit the movement of animals onto the site from the surrounding. When lateral expansion is required the removal of trees will be done in association with the Directorate of Forestry that issues such permits.

All office buildings will be prefabricated structures and of temporary nature. A mobile crushing unit and mill will be used on site. Existing access roads will be utilized and if need be, upgraded to accommodate heavy motor vehicles and operational machines. Digging of foundations and trenches, as well as drilling and blasting are expected in the construction phase activities as well as for the development of a quarry pit. The construction of facilities to divert storm water from the open quarries will be planned and actioned.

Temporary handling and storage areas for construction materials, explosives etc. is planned. Security will be supplied on a 24-hour basis with temporary accommodation for the staff. A fence surrounding the mine site will be constructed to ensure people and domestic animals are not put at risk. The support services and facilities constructed during this phase will either be removed at the end of the construction phase or incorporated into the further phases of the project. Once quarry development and associated activities are completed, mining commences soon after as per the following section.

3.2.3. OPERATIONAL PHASE ACTIVITIES

Main equipment types to be used will include 4X4 bakkies, drill rigs, excavators, crushers, mills, dump trucks, water tankers, explosives transport and magazine unit, bull dozers and front-end loaders. Mining is scheduled to operate 12 hours a day, Monday to Saturday. The mine work force will operate using conventional workplace arrangements that are expected of industry operations in the region and will be transported to and from the quarry site by company transport.

Below is a summary of the projected activities that will occur within the Mining Claims.

1. Mining and extraction

- Commencing with the mining operations, the topsoil is removed by excavation works and deploying of heavy earth moving machineries.
- Clearing of vegetation at the planned drill sites will be necessary. Larger trees should be retained so that the bush can restore itself. Permits from the forestry directorate will be required for this purpose.
- The method of mining operations is of mechanized opencast mining by deep holes drilling and blasting practice, using heavy explosives.
- A blasting expert (certified blasting operator) will be responsible for operation as well as the explosives storage site.
- Blasting will only occur during day light hours so as to reduce any noise nuisance for nearby neighbors.
- Blasting will occur at nominated times to align with periods of low production (such as lunch breaks) so that safe distances are maintained.
- Blasting frequency is expected on an average of twice every month. Excavation of the blasted rock will be completed using excavators.
- Dust suppression will be applied for access roads and crusher units so as to reduce any potential visual and air quality nuisance in accordance with local guidelines.

- Depending on plant availability, ore will either be tipped directly into the crusher for crushing and sent to the mill or alternatively hauled and dumped on stockpiles for later crushing. Waste rock will be deposited in areas designated for waste dumping.
- In summary there will be diverse stockpiles on site ranging from uncrushed rock to varieties of crushed material.

2. Crushing and screening dolomite rock

- After mining, dolomite rock is sent to a jaw crusher for coarse crushing into blocks with a certain particle size to achieve sufficient dissociation of the useful material of the ore.
- The dolomite blocks are sent to a vibrating screen for screening. Qualified materials are directly used in the construction industry as sand and gravel aggregates or continue to be processed.
- Unqualified dolomite will return to the cone crusher for further crushing.
- Crushing operations may occur on 12-hour basis seven days a week. A static crushing unit will be used on site.

3. Final Product/output

The annual production is currently predicted to be 50 thousand cubic meters per annum; however, this is not based on any actual factual resource defined facts through exploration and drilling. The product will be stockpiled at site for a period not longer than 1 year.

A review and update of the ESA Report and EMP will be done, once the deposit/reserves evaluation is confirmed. All this information (deposit reserves, annual production planned for mining and ESA/EMP updates) will be communicated to all the registered interested and affected parties of this project. Once mined, the dolostone will be transported by trucks to consumers in the construction and other industries.

The figure 2 below depicts the process flow for the dolostone production.

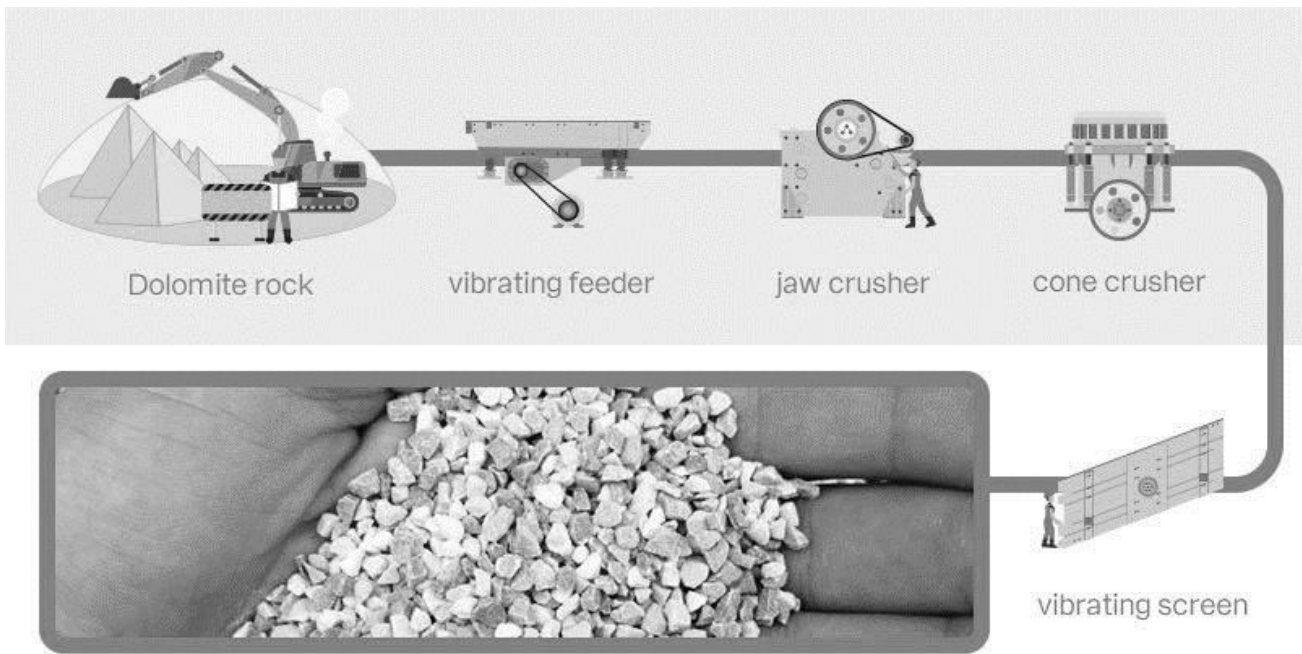


FIGURE 4 - PROCESS FLOW FOR THE PRODUCTION OF DOLOSTONE AGGREGATES

3.2.4. DECOMMISSIONING AND FINAL REHABILITATION

The life of mine for the quarry will be based on the expected demand typically 10 to 17 years. However, this may vary significantly as the demand may fluctuate. Life of operations are therefore very subjective. However, ongoing rehabilitation and landscaping should be conducted as the open pit proceeds. Shaping of the excavated area not only to accommodate rehabilitation efforts, but also in terms of safety, this should be conducted according to a mine plan. In accordance with the EMA, the proponent is required to make funds accessible which will specifically be available and allocated for rehabilitation efforts. This fund should continually be available during the life of mine yet also be sufficient to cover all decommissioning activities when required.

Furthermore, the proponent will ensure that the part of the quarry initially created will be made secure for public safety's sake at mine closure. This specific responsibility should be incorporated into the rehabilitation plan and incorporated into the financial requirements thereof.

Decommissioning activities will include the removal of infrastructure, preparation of final landforms for closure and encouraging vegetation growth in order to reduce the effects of soil erosion and to re-establish normal ecosystem functionality so as to rehabilitate the environment.

3.2.5. ACCESS AND TRANSPORT

The location will be accessible through existing mine roads and tracks from the C41 road from Omakange as practically possible (Figure 3). If the need to create new tracks arises, this will be assessed for any environmental sensitivity.

It is also the Proponents responsibility to negotiate access agreements with landowner's interests are always observed and as may be agreed upon with the landowners individually. Permission from landowners and appropriate authorities is required for any new tracks.



FIGURE 5 - ACCESS ROUTES TO THE SITE

3.2.6. RESOURCES (WATER AND ELECTRICITY)

Mining activities usually needs a supply of water which will be brought to the site. In addition, there is a burrow pit next to the site, which will reserve water (during the rainy season for use).

Should the company find suitable groundwater during the development of the site, a borehole may be used as a water source, provided the permission of the community is given and the necessary abstraction permit is attained from the Department of Water Affairs. A hydrological study shall be conducted in support and only sustainable yields may be abstracted. A diesel-powered generator

and means of solar energy will be used as needed for small-scale mining equipment and lighting for the project.

3.2.7. ACCOMODATION AND SUPPORTING INFRASTRUCTURE

- The team will either be commuting from nearby settlements or will establish camp sites within the license area and with the permission of the community. The team is envisioned to consist of three skilled and 15 non-skilled workers.
- Portable toilets will be installed on-site ad regularly serviced.
- Vehicles (especially pick up bakkies) and heavy machinery including excavators, haul trucks, hammer crushers, screens, conveyers etc will be used during the life of the project.
- Waste will be collected and deposited to the nearest municipal dumpsite.
- Hydrocarbon tanks will be appropriately stored and bunded to hold 110% of the capacity of the tanks and all relevant permits should be applied for by the proponent as required (MME).

4. LEGAL REQUIREMENTS

4.1. LIST OF APPLICABLE LAWS AND LEGISLATIONS

A list of legislation that is applicable to the proposed project is presented in Table 1.

TABLE 2 - LIST OF APPLICABLE LAWS AND LEGISLATIONS

LAW	SUMMARY DESCRIPTION
Constitution of the Republic of Namibia, 1990	<p>The Constitution is the supreme law in Namibia, providing for the establishment of the main organs of state (the Executive, the Legislature, and the Judiciary) as well as guaranteeing various fundamental rights and freedoms. Provisions relating to the environment are contained in Chapter 11, article 95, which is entitled "promotion of the Welfare of the People". This article states that the Republic of Namibia shall –</p> <p>"Actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at; maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for all Namibians, both present and future. The Government shall provide measures against the dumping or recycling of foreign nuclear waste on Namibian territory."</p>
Environmental Management Act (2007) - Ministry of Environment, Forestry and Tourism (MEFT)	<p>The purpose of the Act is to give effect to Article 95(l) and 91(c) of the Namibian Constitution by establishing general principles for the management of the environment and natural resources. to promote the coordinated and integrated management of the environment to give statutory effect to Namibia's Environmental Assessment Policy. to enable the Minister of Environment and Tourism to give effect to Namibia's obligations under international conventions. In terms of the legislation, it will be possible to exercise control over certain listed development activities and activities within defined sensitive areas. The listed activities in sensitive areas require an Environmental Assessment to be completed before a decision to permit development can be taken. The legislation describes the circumstances requiring environmental assessments. Activities listed as per the provisions of the Act will require environmental assessment unless the Ministry of Environment, Forestry and Tourism, in consultation with the relevant Competent Authority, determines otherwise and approves the exception.</p>

LAW	SUMMARY DESCRIPTION
Environmental Assessment Policy (1994)	This policy aims to promote sustainable development and economic growth while protecting the environment in the long term by requiring environmental assessment prior to undertaking of certain activities. Annexure B of the policy contains a schedule of activities that may have significant detrimental effects on the environment, and which require authorisation prior to undertaking.
Water Act 54 of 1956 Ministry of Agriculture, Water and Land reform (MAWLR)	This Act provides for the control, conservation and use of water for domestic, agricultural, urban, and industrial purposes. In terms of Section 6, there is no right of ownership in public water and its control and use is regulated and provided for in the Act. In accordance with the Act, the proposed project must ensure that mechanisms are implemented to prevent water pollution. water permits will also be required to abstract groundwater as well as for "water works".
Forest Act 12 of 2001 - Minister of Environment, Forestry and Tourism (MEFT)	<p>The Act provide for the establishment of a Forestry Council and the appointment of certain officials. to consolidate the laws relating to the management and use of forests and forest produce. to provide for the protection of the environment and the control and management of forest fires.</p> <p>Under Part IV Protection of the environment, Section 22(1) of the Act, it is unlawful for any person to: cut, destroy, or remove:</p> <p>(a) any vegetation which is on a sand dune or drifting sand or in a gully unless the cutting, destruction or removal is done for the purpose of stabilising the sand or gully or</p> <p>(b) any living tree, bush or shrub growing within 100m of a river, stream, or watercourse.</p> <p>Should either of the above be unavoidable, it will be necessary to obtain a permit from the Ministry. Protected tree species as listed in the Regulations shall not be cut, destroyed, or removed.</p>
Hazardous Substance Ordinance 14 of 1974	Provisions for hazardous waste are amended in this act as it provides "for the control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain

LAW	SUMMARY DESCRIPTION
Ministry of Health and Social Services (MoHSS)	circumstances. to provide for the prohibition and control of the importation, sale, use, operation, application, modification, disposal or dumping of such substance and to provide for matters connected therewith"
Atmospheric Pollution Prevention Ordinance 11 of 1976. Ministry of Health and Social Services (MoHSS)	This regulation sets out principles for the prevention of the pollution of the atmosphere and for matters incidental thereto. Part III of the Act sets out regulations pertaining to atmospheric pollution by smoke. While preventative measures for dust atmospheric pollution are outlined in Part IV and Part V outlines provisions for Atmospheric pollution by gases emitted by vehicles.
The Nature Conservation Ordinance 4 of 1975, Ministry of Environment, Forestry and Tourism (MEFT)	Care must be taken to ensure that protected plant species and the eggs of protected, and game bird species are not disturbed or destroyed. If such destruction or disturbance is inevitable, a permit must be obtained in this regard from the Minister of Environment, Forestry and Tourism. Should the Proponent operate a nursery to propagate indigenous plant species for rehabilitation purposes, a permit will be required.
Soil Conservation Act, No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38 of 1971	The act makes provision for the prevention and control of soil erosion and the protection, improvement and conservation of soil and vegetation
Labour Act, 1992, Act No. 6 of 1992 as amended in the Labour Act, 2007 (Act No. 11 of 2007 Ministry of Labour, Industrial Relations	The Labour Act gives effect to the constitutional commitment of Article 95 (11), to promote and maintain the welfare of the people. This Act is aimed at establishing a comprehensive labour law for all employees. to entrench fundamental labour rights and protections. to regulate basic terms and conditions of employment. To ensure the health, safety and welfare of employees under which provisions are made in chapter 4. Chapter 5 of the act improvises on the protection of employees from unfair labour practice.

LAW	SUMMARY DESCRIPTION
and Employment Creation (MLIREC)	
Minerals (Prospecting and Mining) Act 33 of 1992 and special regulations	Sections 50, 52, 54, 57 and 130 of this Act sets out provisions for environmental management for activities arising from mineral, Exploration and exploitation of mineral resources
Affirmative Action (Employment) Act No. 29 of 1998	Fair employment practice
Road Ordinance 1972 (Ordinance 17 of 1972) MWT: Roads Authority	Width of proclaimed roads and road reserve boundaries (S3.1) Control of traffic on urban trunk and main roads (S27.1) Infringements and obstructions on and interference with proclaimed roads. (S37.1)
Regional Councils Act (Act No. 22 of 1992)	The Regional Councils Act legislates the establishment of Regional Councils that are responsible for the planning and coordination of regional policies and development. The main objective of this Act is to initiate, supervise, manage, and evaluate development in the regions.
Traditional Authority Act (Act No. 25 of 2000)	Namibian legislation recognizes both statutory and customary forms of governance. The Traditional Authorities Act recognizes Traditional Authorities (TAs), as the customary leadership of traditional communities as legal entities. The primary functions of these authorities are to promote peace and welfare amongst the community members, as well as to supervise and ensure the observance of the customary law of that community by its members. The Act also stipulates that TAs should ensure that natural resources are used on a sustainable basis that conserves the ecosystem. The implications of this Act are that TAs must be fully involved in the planning of land use and

LAW	SUMMARY DESCRIPTION
	development for their area. It is the responsibility of the TA's customary leaderships, the Chiefs, to exercise control on behalf of the state and the residents in their designated area.
Namibia's Environmental Assessment Policy for Sustainable Development and Environmental Conservation of 1995	Prescribes Environmental Impact Assessments for any developments with potential negative impacts on the Environment
Nature Conservation Amendment Act 5 of 1996	To provide for an economically based system of sustainable management and utilization of game in communal areas
Draft Pollution and Waste Management Bill (1999)	Protection for particular species, resources or components of the environment
Convention on Desertification of 1994	Combating desertification and mitigation of the effects of drought
National Heritage Act 27 of 2004 Ministry of Education, Arts and Culture (MEAC)	This Act provides provisions for the protection and conservation of places and objects of heritage significance and the registration of such places and objects. The proposed activities will ensure that if any archaeological or paleontological objects, as described in the Act, are found during the implementation of the activities, such a find shall be reported to the Ministry immediately. If necessary, the relevant permits must be obtained before disturbing or destroying any heritage

TABLE 3 - INTERNATIONAL LAW TO WHICH NAMIBIA IS A SIGNATORY

INTERNATIONAL LAW TO WHICH NAMIBIA IS A SIGNATORY
Vienna Convention for the Protection of the Ozone Layer - 1985
Montreal Protocol on substances that deplete the Ozone Layer - 1987

The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal – 1989
The Rotterdam convention on the Prior Informed Consent Procedure for Certain Hazardous chemicals and Pesticides in International Trade – 1989
The Rio de Janeiro Convention on Biological Diversity - 1992
United Nations Framework Convention on Climate Change - 1992

4.2. KEY REGULATORS / COMPETENT AUTHORITIES

The regulatory authorities responsible for environmental protection and management in relation to the proposed project including their role in regulating environmental protection are listed in Table 4.

TABLE 4 - AGENCIES REGULATING ENVIRONMENTAL PROTECTION IN NAMIBIA.

AGENCY	RESPONSIBILITY
Ministry of Environment, Forestry and Tourism (MEFT)	Issue of Environmental Clearance Certificate (ECC) based on the review and approval of the Environmental Assessments (EA) reports comprising Environmental Scoping and Environmental Management Plan (EMP) prepared in accordance with the Environmental Management Act (2007) and the Environmental Impact Assessment Regulations, 2012
Ministry of Mines and Energy (MME)	Competent authority. The national legislation governing minerals prospecting and mining activities in Namibia fall within the jurisdiction of the Ministry of Mines and Energy (MME) as the Competent Authority (CA) responsible for granting authorisations. The Minerals Prospecting and Mining Act No.33 of 1992 approves and regulates mineral rights in relation to exploration, reconnaissance, prospecting, small scale mining, mineral exploration, large-scale mining, and transfers of mineral licences.

4.3. PERMITS

Some permits related to mining activities are listed in Table 5.

TABLE 5 - APPLICABLE PERMITS TO THE PROPOSED PROJECT

PERMITS/CERTIFICATES	ACTIVITY	VALIDITY
Fuel Installation Certificate	Regulates the amount of fuel product in possession	3 months (temporary)/ permanent
Forestry Permits	Regulates the forest species to be cleared.	Temporary.

5. ALTERNATIVES CONSIDERED

In terms of the Environmental Management Act, No. 7 of 2007 and EIA Regulations, alternatives considered should be analyzed to identify different means of meeting the general purpose and requirements of the activity, which may include alternatives to, location, type of activity, design and layout, technology and operation aspects. This is to ensure that during the design evolution and decision-making process, potential environmental impacts, costs, and technical feasibility have been considered, which leads to the best option(s) being identified. The alternatives considered are:

5.1. SITE/LOCATION

Minerals Occurrence Location: Several economic deposits are known to exist in various locations of Namibia, some of which have been explored and mined by various companies throughout the years. However, mineral occurrence is often highly localized and therefore primarily determined by the site geology. As part of the license, the proponent proposes to explore and mine for potential economic dolerite mineral occurrences in this specific Mining Claims. There are no alternative locations considered for mining.

5.2. INFRASTRUCTURE

Access Roads – The Proponent will use the already existing external and internal road networks during the first phases of the project, should any new access be created, it will be done with the permission of landowners/land custodians and MEFT.

Equipment and infrastructure – The equipment and infrastructure options considered by the proponent are deemed sufficient at this stage of the project. However, in the world of revolving technology, the proponent may opt to employ other improved and environmentally safe to use equipment/infrastructure in the future when deemed necessary in order to maximize the project output.

5.3. WATER SUPPLY

Water will be brought to site from the nearest town/village and stored in a tank on site. The alternative is to use existing boreholes or do a hydro search to drill a new borehole. In addition, there is a burrow pit next to the site, which will reserve water (during the rainy season for use).

5.4. POWER SUPPLY

Power will be sourced from a diesel generator; the alternative is to Install photovoltaic solar panels at a later stage.

5.5. NO GO ALTERNATIVES

The “no go” alternative implies that the status quo remains, and nothing happens. Should the proposal to explore on the license be discontinued, none of the potential impacts (positive and negative) identified would occur. If the proposed project is to be discontinued, the current land use for the proposed site will remain unchanged.

The key losses that may never be realized if the proposed project does not go ahead include:

- Lost opportunity for foreign direct investment.
- Loss of potential income to local and national government through land lease fees, license lease fees and various tax structures.
- Socio-economic benefits such as skills acquisition to local community members, employment and borehole upgrades, etc. would be not realized.

Considering the above losses, the “no-action/go” alternative was not considered a viable option in the interest of the directly affected community and the proponent.

6. BASELINE ENVIRONMENT/ STUDY AREA

6.1. CLIMATE

6.1.1. TEMPERATURE

The climate of the Omusati/Kunene Region is classified as semi-arid (tropical steppe) to very arid (desert). Maximum and minimum temperatures at Opuwo (closest recorded data to site) during the hottest and coldest months range between 34 to 36 °C and 6 to 11 °C, respectively. The region is one of the warmest regions with high temperatures (warm and hot) throughout the year. Hot seasons in these areas last for almost 4 months, which is during September to early January and average daily temperatures being 34.4 °C (Figure 6).

Throughout the year, the hottest month is October - November, temperatures here are higher than the country's average by 3.29%. Relative humidity in the Opuwo area ranges between 80 to 90% during the most humid months and between 10 and 20% during the least humid months. The average annual rates of evaporation in the Opuwo area range between 1,960 and 2,100 mm (Mendelsohn et al., 2009).

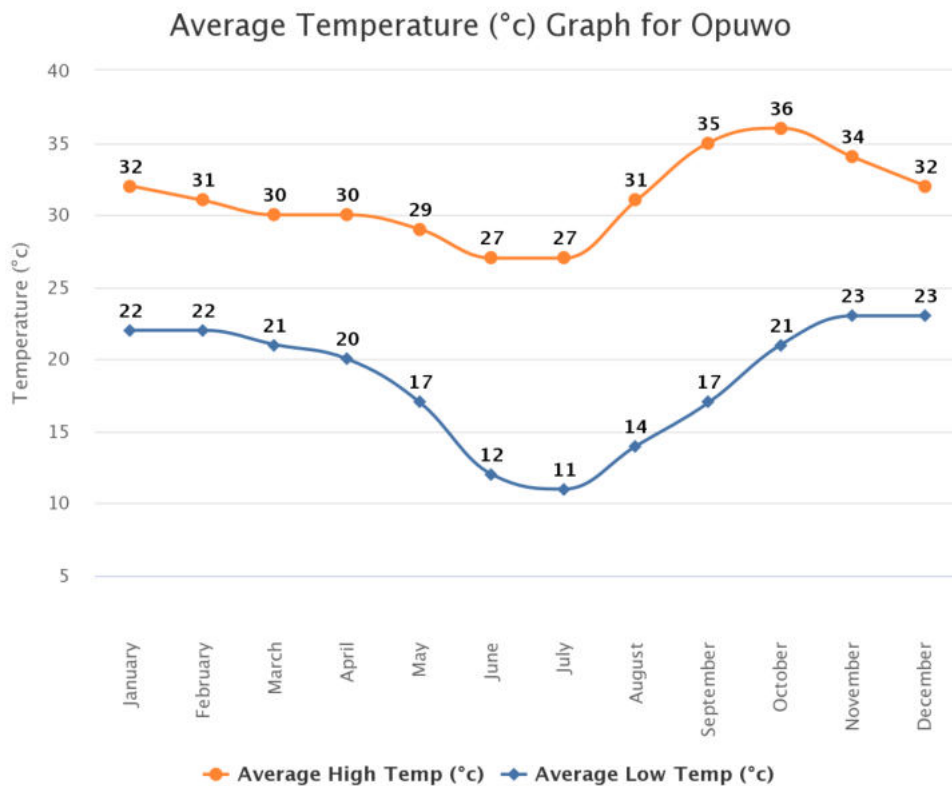


FIGURE 6 - AVERAGE HIGH AND LOW TEMPERATURE FOR OPUWO (WWW.WORLDDWERATHEONLINE.COM)

6.1.2. RAINFALL

The Omusati Region is a semi-arid and characterized by the high temperature ranging between 25-37 degrees Celsius. The average rainfall per year is about 350-500 mm between November to April. The Region falls under the very flat hydrogeological Cuvelai Basin dipping from some 1150 m above sea level (asl) in the northeast to 1080 m asl in Etosha Pan. The rainfall decreases from 600 mm in the northeast to 300 mm in the west. The relatively high and reliable average rainfall allows for crop farming. The rainy season is between December and March, with the dry season from May to September (Figure 7). Precipitation increases from the west to the east of the Kunene Region and ranges between less than 50 mm (at the coast), 300 to 350 mm (at Opuwo), and 350 to 400 mm (at Ruacana, Omusati Region) per annum. Omakange typically receives about 57 mm of precipitation and has 24.5% of rainy days annually (Ministry of Environment & Tourism, 2011).

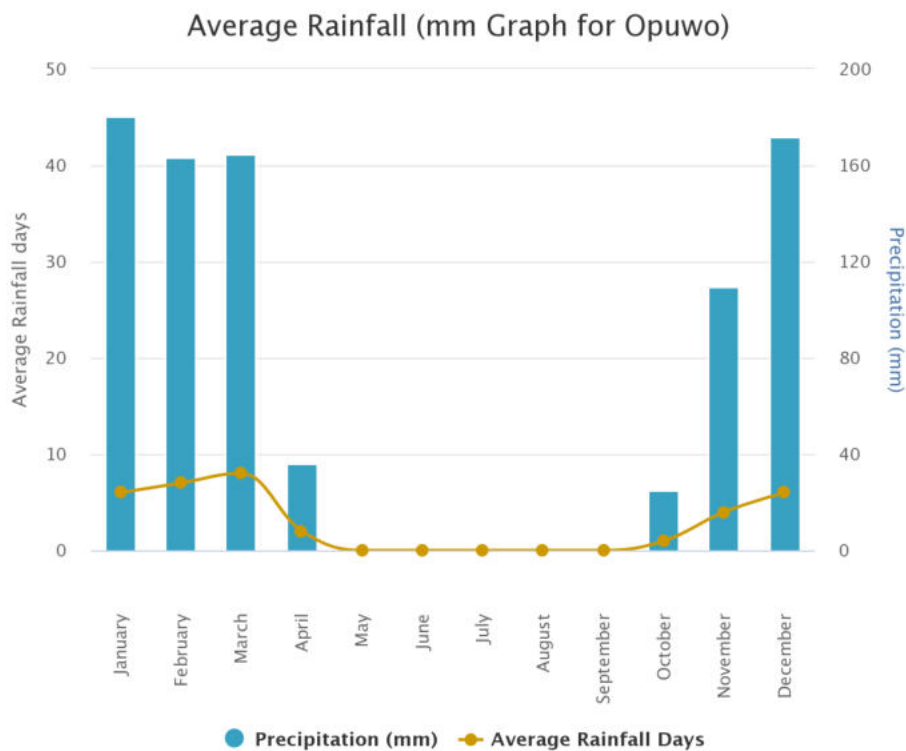


FIGURE 7 – AVERAGE RAINFALL IN OPUWO (www.worldweratheonline.com)

6.1.3. CLOUD COVER

The average percentage of cloud cover in Opuwo/ near Omakange fluctuates seasonal, with the clearest part of the year lasting for approximately 7 months and begins early April and ending early November. June is the clearest month of all. Early November towards early April marks the cloudiest part of the year with a duration of 5 months and the cloudiest month being January with an average of 635 overcast (SLR, 2016).

6.1.4. SUNSHINE AND WIND

This area has an average of 13 hours of sunshine with December being the sunniest month whilst August usually receives the less sunshine hours in a year. Summers are long and scorching hot, while winters are short, cool and windy. The clearest part last for about 4.4 months which begins around November and ends in April. Wind experienced at any locality is highly reliant on local geography plus possibly other factors (direction, hourly and speed). The seasonal variability in the wind field is shown in Figure 8 for Sesfontein which was the closest wind data collecting site identified nearer to the project location. The seasonal wind field is predominantly south-westerly and west-south-westerly winds during the summer months (Nov – Feb). During the autumn months (Mar – May), the westerly flow subsided with more frequent winds from the east and east-northeast. The maximum windspeed recorded for areas around Sesfontein in the figure below ranges from 2 – 6.9mph western wind. (World weather, 2022).

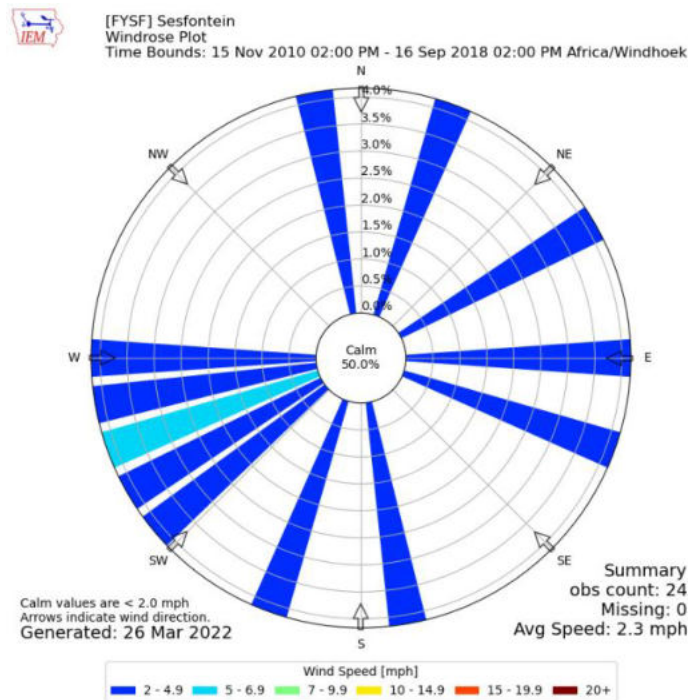


FIGURE 8 - WINDROSE FOR SESFONTEIN NOVEMBER 2010 TO SEPTEMBER 2018 (Aiowa weather, 2022)

6.2. BIOPHYSICAL ENVIRONMENT

6.2.1. FLORA

Namibia's vegetation is strongly influenced by rainfall patterns. The study area lies within the Kaokoveld that falls under the Mopane woodland savanna vegetation biome as defined by (Giess, 1998) and shown in Figure 10. The Kaokoveld is famous for its floristically diversity area with high levels of plant endemism attributed to diversity in soils, topography and climate (Craven, etc., 2006). The vegetation sensitivity of these habitats ranges from moderate (on the mid slopes and high slopes and the mopane woodland red sand plains) to high (along the drainage line/riparian) to very high (on the calcrete plains). According to Mendelsohn (2002), overall plant species richness in the general area is low to medium (approx. 300 to 399 spp.).

The vegetation within the study site was found to be dominated by mopane (*Colophospermum mopane*) and purple-pod terminalia (*Terminalia prunioides*). Various *Commiphora* species, *Moringa ovalifolia*, *Sterculia africana* and *Sesamothamnus guerichii* are also found on the mid-slopes and/or higher slopes of the surrounding area which is considered to be of medium sensitivity. Some species of conservation concern which may potentially occur in the area are *Commiphora multijuga* and *Moringa ovalifolia* and they are expected in low numbers. Mopane trees are prevalent in all the habitats and it is protected due to its high value to humans and their livestock. Although several protected species occur in this habitat, with the exception of *Colophospermum mopane* they are present in very low numbers.

The average percentage cover per vegetation stratum for the different plant community types or associations defined in the EIA study showed that, generally trees are scarce in the area with the highest average cover recording a rather low value of less than 4 % per specie type, this means that the structural composition of the area is limited to shrublands or bushlands, plains and grasslands.

TABLE 6 - FLORA DATA FOR THE AREA

Biome	Savanna
Vegetation structure type	Woodland
Number of plant species	More than 300 - 400
Dominant plant species 1	<i>Colophospermum mopane</i>
Dominant plant species 2	<i>Terminalia prunioides</i>

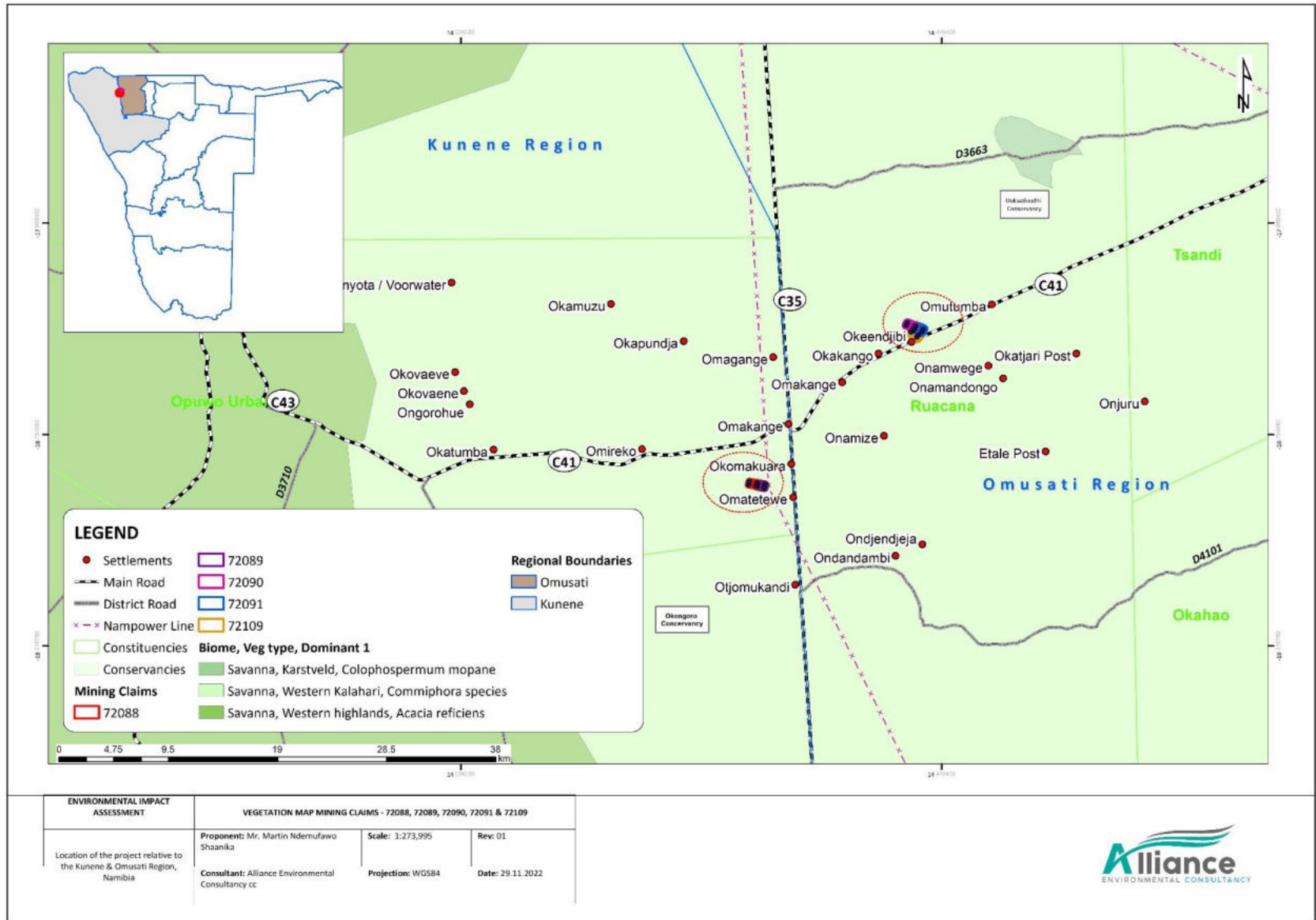


FIGURE 9 -VEGETATION COVER OF THE SURROUNDING AREA.

Some bush clearing may be required during the 2nd and 3rd phase of exploration where access roads, drill pads and bulk sample sites are chosen. The clearing of any vegetation would not be on the scale, which triggers a full EIA, but permits to fell trees and clear bush for exploration will require a Forestry Permit. In addition to this, vegetation clearing restrictions within 100m of rivers must be taken into account as outlined in the draft regulations of the Water Resource Management Act (Rothauge 2017). Any relaxation of this rule needs to confirm and approved by the Ministry of Agriculture, Water and Land Reform

6.2.2. FAUNA

Nationally, the area is regarded as a relative high mammal, reptile and intermediate amphibian diverse (Mendelsohn et al. 2002). Furthermore, the study area is known to have a relative high number of reptile and mammal species that are endemic to Namibia. The bird's diversity that occurs in or near the area ranges from 111 to 140 species. Because of the dominance of mopane trees in the area, the mopane worm (*Gonimbrasia belina*), is likely to be seasonally common in this habitat, which is a food source for people and animals. Another important food-producing invertebrate in this habitat are the mopane bees (*Meniponula* sp.), which may be present in substantial quantities.

Approximately 8 to 11 frog species may potentially occur in the study area. Most of these species are expected in the Riverine and Drainage Line habitat. However endemic frog species such as Dombe dwarf toad and Marbled rubber frog may be expected to occur in the Mountains and Hills habitat as well (Simmons et al. 1998).

According to the Atlas of Namibia, the study area is considered a high reptile diversity area and 51 to 60 species may potentially occur in the study area of which two are classified as Vulnerable, i.e., the African rock python (*Python natalensis*) and the leopard tortoise (*Geochelone pardalis*).

The mammal's diversity in the study area ranges from 61 to 75 species and endemism ranging from 9 to 10 species. Those that could potentially occur in the study area include.

- Species considered Near Threatened, (Griffin, 2003): Brown hyaena (*Parahyaena brunnea*), Commerson's Leafnosed Bat (*Hipposideros vittatus*), Angolan epauletted fruit bat (*Epomophorus angolensis*) and white rhinoceros (improbable in study area, *Ceratotherium simum*).
- Endemic or near-endemic to Namibia, (Griffin, 2003): Hartmann's mountain zebra (*Equus zebra hartmannae*), Black-faced impala (*Aepyceros melampus petersi*), black mongoose (*Herpestes flavescens*), bushveld sengi (*Elephantulus intufi*) and the mountain ground squirrel (*Xerus princeps*).
- Giraffe (*Giraffa camelopardalis*) and savanna pangolin (*Smutsia temminckii*) are among the other mammals' species that are expected in the surrounding area.

There are three Conservancies in the Region, namely Sheya Shuushona Conservancy in Okahao Constituency, Uukwaluudhi Conservancy and Uukwaludhi Safari Lodge in Tsandi Constituency. The Government has relocated about 400 heads of game into these Conservancies which includes 47 rare black-faced impalas and four endangered black rhinos, warthogs, african wild cats, bat eared fox, black nose impalas, blue wild beasts, bush bucks, elephants, giraffes, hyenas, kudus, mongoose, oryx, springboks, zebras, leopards and cheetahs.

6.3. SOIL

Almost all the soils in central-northern Namibia have been deposited by wind and water. The soils are typical of arid regions with low fertility due to low organic matter that is returned to the soil (Mendelssohn et al, 2000). A large proportion of the soils in this area are broadly categorized as Arenosols or sandy soils (Mendelssohn et al. 2002; Erkkila & Siiskonen 1992) also indicated in Figure 10. The deeper parts of this area are characterized by unfertile deep Kalahari sands and spontaneously patches of clayey sodic sands dominating in the hilly parts and oshanas, with sodic sands occurring on the surrounding higher grounds.

There is red clay-sodic sand near the project site. A desk review of previous research at Ogongo and Omano BIOTA observatories revealed a dominance of regosols (signaling low influence of soil forming processes) and cambisols. Leptosols, fluvisols and aerosols are also common in the area but to a lesser extent.

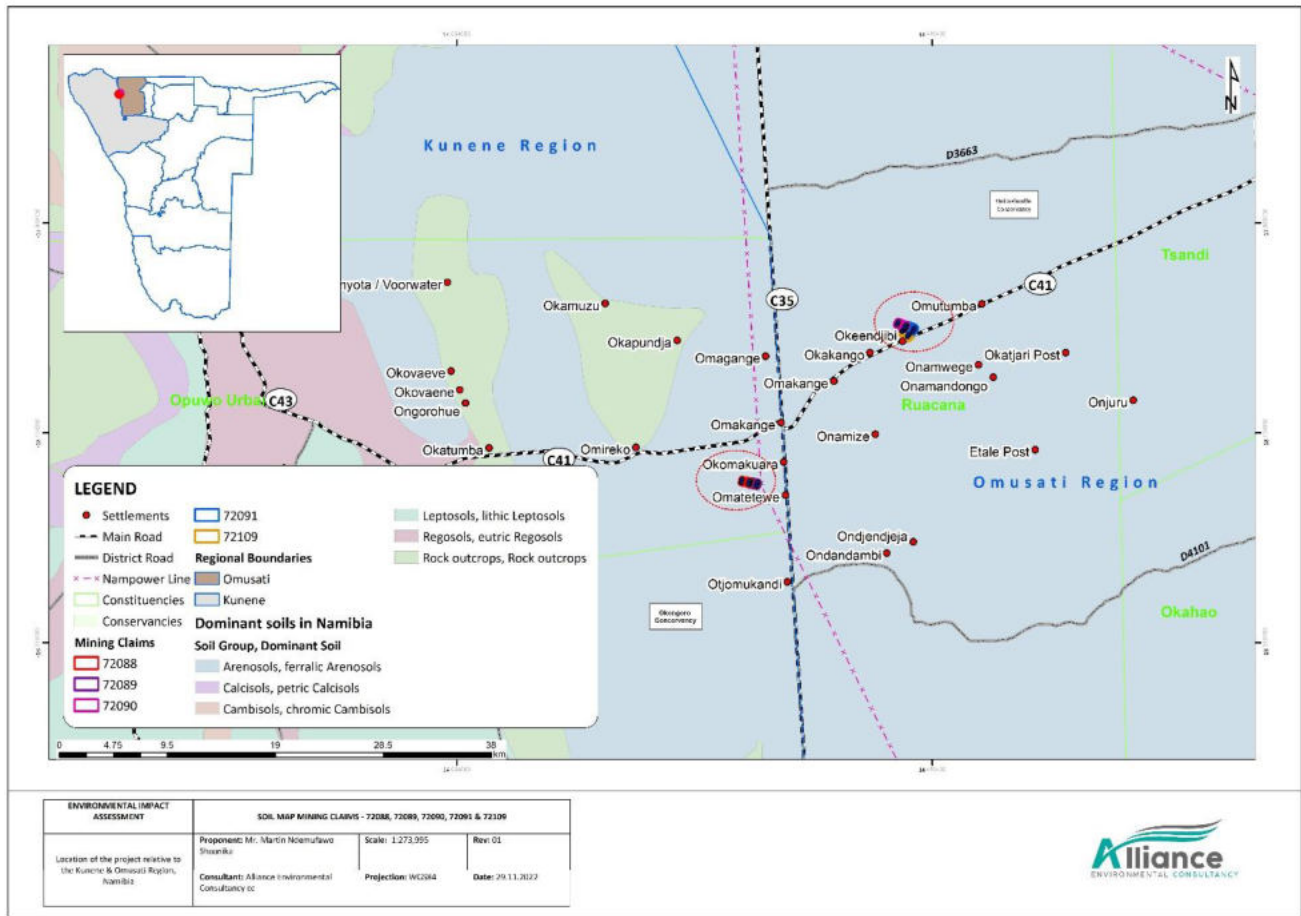


FIGURE 10 - DOMINANT SOIL AROUND THE STUDY AREA

6.4. GEOLOGY

The Omusati Region's physical geography is one of the virgin landscapes in Namibia. The Rock formation presents some mining potential that could benefit the region economically. The natural lands, rocks, minerals, soil, springs and rivers signify the regions valued resources. Omusati Region is paradise of physical creations dating back to 250 million years, with stimulating spectaculars rock formations that are clearly exposed.

The Region is floored by mid-Proterozoic crustal rocks of the Congo Craton and contains possibly as much as 8000 meters of sedimentary rocks of the Nosib, Otavi and Mulden Groups of the late-Proterozoic Damara Sequence, 360 meters of Karoo rocks and a blanket of semi-consolidated to unconsolidated Cretaceous to Recent Kalahari Sequence sediments up to 600 m thick (Miller 1997). The Omusati is dominated by the meta-sediments and the plutonics of the coastal branch of the Damaran orogenic belt, the Kaokoveld orogen of Cambrian age (Miller, 2008). Damara Orogen rocks which

forms part of Neoproterozoic orogenic belt comprises the Kaokoland. In the Kaoko Belt the Swakop Group overlies the Nosib Group west of the Sesfontein thrust fault. East of the fault where Nosib age sediments were deposited in half-grabens on the basin margin the Group is overlain by more carbonate rich units of the Otavi Group. The region is characterized by a series of north-northeast trending ridges and valleys (Konopásek, 2005).

The claims fall within the Kalahari, Namib Sands and calcrete as indicated in Figure 11. This area most probably has Pan-African Damara Sequence resting on a gneissic and granitic basement containing mid-Proterozoic cover rocks that are intruded by granites justifying the quarrying venture by the project proponent.

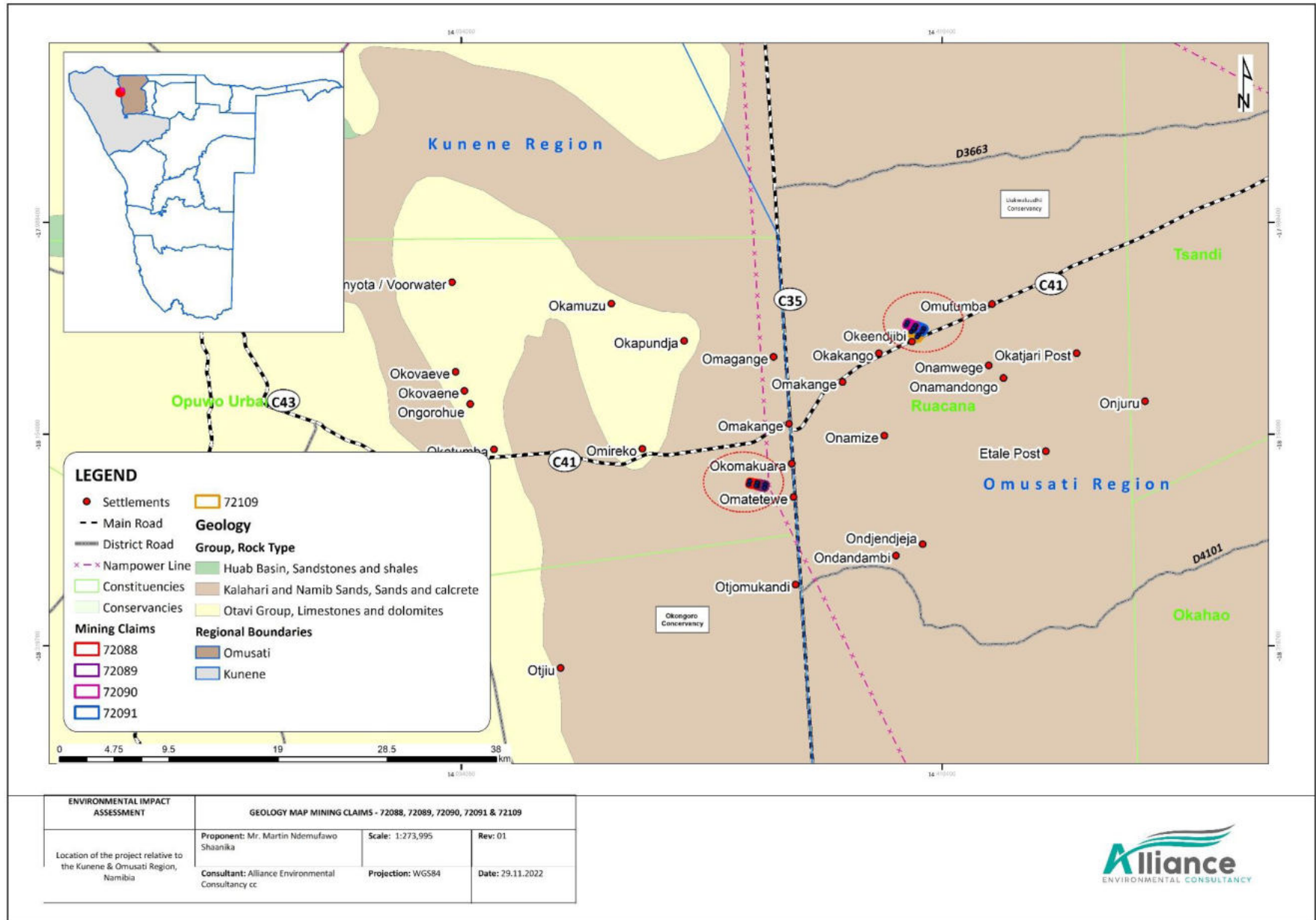


FIGURE 11 - GEOLOGY OF THE SURROUNDING AREAS.

6.5. HYDROLOGY

The area is generally flat with very few evidence of surface erosion. The surrounding areas are intersected by a network of shallow water courses locally known as oshanas which comprise the Cuvelai Delta. The area falls within the Owambo basin as indicated in Figure 12. The entire area is dependent on groundwater resources for domestic purposes and stock watering. Water for this project will be brought to site by truck, no boreholes as a source of water is envisioned at this stage. The underlying granitic rock stretching from the Namib Desert allows the water table to retain more water due to the flat terrain of the area.

The underlying granitic rock stretching from the Namib Desert allows the water table to retain more water due to the flat terrain of the area. Springs, soil, underground aquifers, and perennial rivers have a key influence on agricultural production and tourism in the region. The oshanas are usually recharged by flood waters that flow from the Angolan highlands where annual rainfalls may exceed 700 mm. The oshanas receive and store water from heavy rainfalls that are occasionally experienced in this part of the country (FPM Consulting Services, 2016).

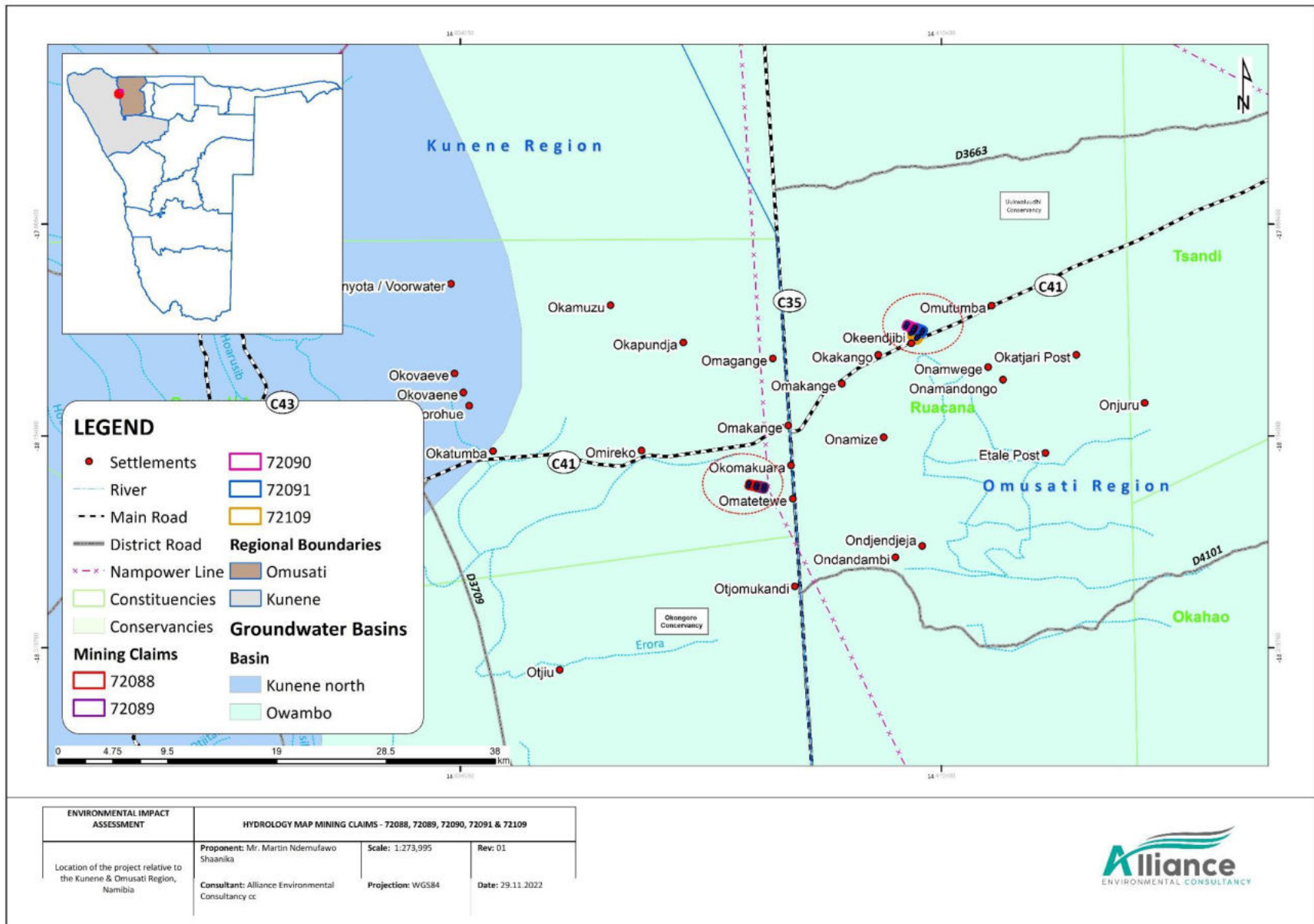


FIGURE 12 - HYDROLOGY SETTING OF THE SURROUNDING AREA.

6.6. SOCIO-ECONOMIC SETTING

6.6.1. REGIONAL AND LOCAL PROFILE

Omusati Region is geographically located in the Northwestern part of Namibia and covers a range of biomass or landscapes. The region's administrative capital is Outapi. The region got its name from the Mopane tree (omusati: Ndonga: Mopane) which is the dominant species in the region. The region also borders Kunene region to the west and Oshana to the east. The towns of Okahao, Oshikuku and Ruacana as well as the self-governed village Tsandi are situated in this region. The region is home to the Ruacana Falls. The waterfall is 120 meters (390 ft) high and 700 meters (2,300 ft) wide in full flood and is among the largest waterfalls in Africa, both by volume and width.

The region covers an approximate area of 26,551 km² of the total Namibian land and is the second home to roughly 243 166 residents (133 621 females and 109 545 males) (Census 2011) which signifies 9.1% of the Namibian population. As earlier indicated, the Region consists of twelve (12) Constituencies, three Settlements, namely Ogongo, Okalongo and Onesi, four Towns i.e. Okahao, Oshikuku, Outapi and Ruacana and Tsandi Village Council. There are nine recognized Traditional Authorities namely Ombalantu, Ombandja, Ongandjera, Oukwanyama, Uukolonkadhi, Uukwaluudhi, Uukwambi, Otjikaoko and Vita-Tom Royal House. (Census, 2011).

The northern part of Omusati is far more densely populated than the south, where the grazing is of poor quality and the water generally saline. This is predominantly an agricultural region in which mahangu, which is also known as pearl millet is cultivated successfully and consumed as a staple food. Omusati Region is predominantly an agricultural Region, focusing on both crop and livestock farming. This is due to its fertile soil and the availability of water from the water canal. A canal which carries water from Ruacana River to Oshakati passes through Outapi Town. The water from the canal is used for irrigation at the Government-owned Farm at Etunda in Ruacana Constituency where crops such as maize, watermelons, tomatoes, potatoes and bananas, amongst other fruits and vegetables are grown. Apart from the said activities, local people also engage in livestock farming, conservancies and retailing.

In this context, the said sectors become the main economic nerves of the Region as far as the promotion and support of the development is concern. In addition, the construction of roads continues to connect the Region to the outside world. For example, the construction of Omafo-Okalongo-Outapi Road connects the Region to Ohangwena, Rundu and Zambezi Regions. Likewise, the construction of Iitananga-Omakange Road connects the Region to Kunene Region and thereby shortens the distance to Outapi.

The Ruacana Waterfront, Otjipahuriro Community Camp Site, Omugulugwoombashe National Heritage, Ombalantu Baobab Tree, Okahao Baobab Tree, Outapi War Museum, Olufuko Festival Centre, Giant Baobab Tree near Tsandi Village Council, Salt Pan in Otamanzi, Tsandi Royal Homestead and Cultural Heritage Museum and Ogongo Game Camp, to mention a few, are worth visiting. Again, the accommodation facilities are well established in and around the Region.

Currently, there are no major industrial activities unfolding in the Region. Besides, quarries are being mined through production of building materials for roads and other infrastructure. In the surrounding of Ruacana Constituency, there is Ongaka Slate, FL Crushers and Aiwa Producing Clay which produce paving bricks, roof and floor tiles. They are primarily targeting local and national markets. This is a major industry that provides quality materials for the construction of gravel roads and other infrastructure. Hence, further investments in this industry will promote and strengthen the standards of outputs and thereby improving the living standards of the people through job creation

There is one service provider of electricity in the Region, namely NamPower whilst Northern Electricity Distribution (NORED) is the only distributor. The Region has four District Hospitals, namely Outapi, Tsandi, Okahao and Oshikuku. Each District has one or two Health Centres which are Omahenene and Omonawa Tjihozu under Outapi District, Onesi under Tsandi District, Indira Gandhi under Okahao District and Elim and Okalongo under Oshikuku District and a private hospital in Tsandi Village.

6.6.2. ARCHAEOLOGICAL AND HERITAGE

A review of the National Heritage Council and the environmental information services database was conducted, and no known heritage sites were identified in the project area. In cases where heritage sites are discovered, the chance finds procedure will be used where appropriate measures will be undertaken upon discovering sites of archaeological importance. All archaeological remains are protected under the National Heritage Act (2004) and will not be destroyed, disturbed or removed.

7. STAKEHOLDER ENGAGEMENT

7.1. PUBLIC PARTICIPATION

Public participation is the cornerstone of the Environmental Impact Assessment process. These include the ongoing provision of sufficient information (in a transparent manner) to Interested and Affected Parties (I&APs). During the public participation process, I&APs will be given the opportunity to comment on the findings of the reports, during the specified comment periods.

Good consultation helps foster genuine and positive relationships with mutual respect, shared concerns and objectives between the company pursuing the development and the community. The public participation facilitator's role is to facilitate that process of dialogue to ensure there is transparency and accountability in decision-making and public confidence in the proposed project and its management.

7.1.1. ADVERTS

Public notices/invitations were placed in the following newspapers for two consecutive weeks on the 01st of November 2022 and the 08th of November 2022: Appendix D provides Tear sheets of the adverts.

- The Republikein newspaper
- The Allgemeine Zeitung
- The Sun newspaper

7.1.2. SITE NOTICE AND VISIT

Site notices were also placed at the Omakange Conservancy Hall (See Figure 13 below)



FIGURE 13 - SITE NOTICES PLACED AT THE OMAKANGE CONSERVANCY HALL

7.1.3. STAKEHOLDER ENGAGEMENT

The site visit was conducted on 19th of November 2022 together with two public and information sharing meetings that were held at Uukwaluundhi Conservancy Office Hall, Omakange village. The attendance included the Traditional Authority (TA) leaders and the surroundings community at large. The consultation was divided into two (2) sessions, session one (1) with the TA leaders, while session two (2) was attended by the public and also three (3) Senior TA leaders. A presentation was given by AEC Consultants cc. The presentations entailed an outline of the project, the environmental assessment process and the main potential issues or impacts identified to date. The audience were encouraged to give comments and raise any questions or concerns they had, either verbally during the meeting or written on paper. They were also encouraged to send comments later by e-mail either individually or through the esteemed traditional authority or constituency office.

Below are the key issues/concerns that were raised during the meeting:

- The issue of rehabilitation of the site once the project concludes.
- Consideration of reviving the dormant crushers that are within the area.
- Proposals for social and corporate responsibilities from the attendees.
- The issue of unemployment in the surrounding areas; the project to consider or give priority to local unemployed individuals especially the youth.

Furthermore, the minutes of the meeting and response as well as PowerPoint presentation are included in Appendix D. In the event that the ECC is granted the proponent shall ensure ongoing consultation with all relevant affected parties for access to land and other resources. Below are some images captured during the consultation period.



FIGURE 14 - PUBLIC MEETING AND INFORMATION SHARING IN SESSION UUKWALUUNDHI CONSERVANCY OFFICE HALL, OMAKANGE VILLAGE.

8. EVALUATION OF IMPACTS

8.1. ASSESSMENT PROCEDURE

The purpose of this section is to assess and identify the most pertinent environmental impacts by describing certain quantifiable aspects of these impacts and to provide possible mitigation measures to minimize the magnitude of the impacts that are possibly deriving from the various activities that constitute the proposed prospecting and mining activities on Mining Claims (MC) 72090,72091 and 72109 by the proponent.

The identification of potential impacts included impacts that may occur during the construction, operational and decommissioning phases of the project. The assessment of impacts includes direct, indirect as well as cumulative impacts. In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed projects is well understood so that the impacts associated with the projects can be assessed.

The process of identification and assessment of impacts includes:

- Determining the current environmental conditions in sufficient detail to establish a baseline against which impacts can be identified and measured.
- Determining future changes to the environment that will occur in a case where the activity does not proceed.
- Develop an understanding of the activity in detail to understand its consequences; and
- The identification of significant impacts which are likely to occur if the activity is undertaken.

The following potential impacts on the environment during construction and operation activities have been identified:

- **Dust & Noise**
Due to the increase movement of vehicles, trucks and other operational machineries.
- **Health & Safety**
from the handling of equipment and use of machinery as well as potentially contracting diseases linked to exposure to dust.
- **Visual**
Changes to the aesthetic appeal of the area due to presence of people, vehicles and machinery. Visible changes to habitats due to human activities.
- **Waste**
Resulting from maintenance work performed on the machinery as well as littering in the area include packaging from food or other products and consumables.

Soil pollution including petrochemical spills from vehicles (bakkies), water trucks, diesel operated generator as well as the trailer mounted diesel tank for fuel storage.

– **Ecological**

Potential removal of vegetation to allow project activities and erect temporary site shade structures and prefabricated container office onsite during field work and mining operations. Habitat disturbance due to drilling, excavation, blasting and increased flow of traffic.

– **Groundwater and surface water**

Due to inadequate management of waste, discharge and infiltration of non-contained wastewater as well as potential spillages of drill fluid, lubrication or drilling that penetrates the ground water table. This may also be influenced by site operations such as maintenance activities or accidental fuel spills.

– **Topography**

Disturbance of the topography due to the blasting and resource removal from the quarry.

– **Heritage & Socio-Economic**

Potential disturbance and damage to unforeseen archaeological or heritage sites during excavation and blasting activities and movements in the area.

– **Impact of poor communication**

Miscommunication may lead to negative insulence in the community towards the project. Increased movement in the surrounding area and inadequate deliverable of notice for exploration/mining and or operational activities in the community may result in conflicts with landowners and the affected community.

The following methodology is applied to the predication and assessment of impacts and risks. Potential impacts and risks have been rated in terms of the direct, indirect, and cumulative where:

Status	Whether the impact/risk on the overall environment will be
	<ul style="list-style-type: none"> • Positive - Environment overall will benefit from the impact/risk; • Negative - Environment overall will be adversely affected by the impact/risk; • Neutral - Environment overall not be affected.

Direct impacts	Impacts are directly caused by the activity and usually occur at the same time and place of the activity. These impacts are often related to the construction, operation or maintenance of an operation and are often obvious and quantifiable.
Indirect impacts	These types of impacts include all the potential impacts that are not evident immediately when the activity is carried out, or which occur at a different place due to the activity.
Cumulative impacts	Impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present, or reasonably foreseeable future activities.

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:
	<ul style="list-style-type: none"> Site specific - Only within the site boundaries Local - limited to within 15 km of the area Regional - limited to ~100 km radius National - limited to within the borders of Namibia International - extending beyond Namibia's borders

Consequence	The anticipated consequence of the impact:
	<ul style="list-style-type: none"> • Extreme - Environmental functions and processes are altered such that they permanently cease); • Severe - Environmental functions and processes are altered such that they temporarily or permanently cease); • Substantial - environmental functions and processes are altered such that they temporarily or permanently cease); • Moderate - Environment continues to function but in a modified manner); or • Slight - No natural systems/environmental functions, patterns, or processes are affected.

Duration	The timeframe during which the impact/risk will be experienced
	<ul style="list-style-type: none"> • Very short term - instantaneous; • Short term - less than 1 year; • Medium term - 1 to 10 years; • Long term - The impact will occur for the project duration • Permanent - The impact will occur beyond the project decommissioning.

Reversibility of the Impacts	The extent to which the impacts/risks are reversible assuming that the project has reached the end of its life cycle (decommissioning phase)
	<ul style="list-style-type: none"> • Yes - High reversibility of impacts (impact is highly reversible at end of project life); • Partially - Moderate reversibility of impacts; or • No - Impacts are non-reversible (impact is permanent).

Using the criteria above, the impacts will further be assessed in terms of the following:

Probability	The probability of the impact/risk occurring
	<ul style="list-style-type: none"> • Very likely; • Likely; • Unlikely; • Very unlikely; and • Extremely unlikely.

To determine the significance of the identified impact/risk, the consequence is multiplied by probability. This approach incorporates internationally recognized methods from the IPCC (2014) assessment of the effects of climate change and is based on an interpretation of existing information in relation to the proposed activity. The significance is then rated qualitatively as follows against a predefined set of criteria (i.e., probability and consequence) as indicated below:

		IMPACT = CONSEQUENCE X PROBABILITY				
PROBABILITY	Very Likely					Very High Impact
	Likely				High Impact	
	Unlikely			Moderate Impact		
	Very Unlikely		Low Impact			
	Extremely Unlikely	Very Low Impact				
			Slight	Moderate	Substantial	Severe

Where:

Significance	Will the impact cause a notable alteration of the environment?
	<ul style="list-style-type: none"> • Very low (5) - The risk/impact may result in very minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures and will not have an influence on decision-making. • Low (4) - The risk/impact may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures, and will not have an influence on decision making. • Moderate (3) - The risk/impact will result in moderate alteration of the environment and can be reduced or avoided by implementing the appropriate mitigation measures and will only have an influence on the decision-making if not mitigated. • High (2) - The risk/impact will result in major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision making); and • Very high (1) - The risk/impact will result in very major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision making.

Confidence	The degree of confidence in predictions based on available information and specialist knowledge
	<ul style="list-style-type: none"> • Low - Based on the availability of specialist knowledge and other information • Medium - Based on the availability of specialist knowledge and other information • High - Based on the availability of specialist knowledge and other information

Impacts are evaluated for the construction, operation phases and decommissioning of the development. Impacts have been evaluated with and without mitigation in order to determine the effectiveness of mitigation measures on reducing the significance of a particular impact. The Assessment is presented in the following section and further in the Environmental Management Plan (EMP).

9. IMPACTS ASSESSMENT

The purpose of this section is to assess and identify the most pertinent environmental impacts by describing certain quantifiable aspects of these impacts and to provide possible mitigation measures to minimize the magnitude of the impacts that are possibly deriving from the various activities that constitute the proposed minerals prospecting and mining within MCs 72090,72091 and 72109. These identified potential impacts have been evaluated. Mitigation measures are proposed for each aspect of the different potential impacts identified. Comments and concerns raised during the public consultation process have been considered and included.

TABLE 7 - ECOLOGICAL IMPACT ASSESSMENT TABLE

Impact	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Through mining in general there is potential for impacting the diversity of species within the various habitats by reducing population numbers of certain species.	Loss of Habitat and Species during exploration and mining activities Alteration of topography during construction and operational phases can occur as a result of excavation of the ore bodies leaving a deep, open	Negative	Local	Long term	Substantial	Very Likely	Partially	<ul style="list-style-type: none"> No specialist fauna and flora studies were commissioned for the EIA. Specialist studies were deemed unnecessary for this environmental impact assessment due to low intensity and extent of the activities. Exploration or mining may occur at designated sites throughout the MCs but the total activity footprint as a percentage of the total areas of each habitat is estimated to be very low. The planning of the mine layout must endeavour reduce the footprint to a minimum without 	Moderate (3)	Low (4)	3	Medium

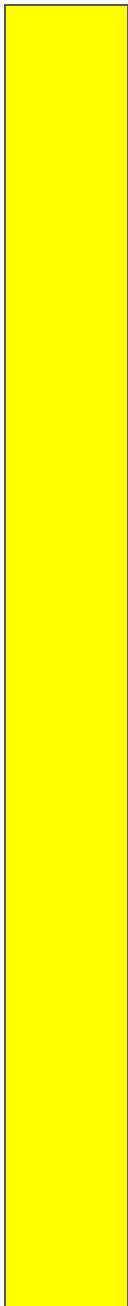
<p>pit or several smaller quarries on the land</p>					<p>compromising the realistic needs of the business operation and making decisions that will safeguard against indiscriminate habitat alteration. If any top soil exists then this should be stockpiled for use during rehabilitation.</p> <ul style="list-style-type: none"> - Engage interested stakeholders to participate on site in the rescue and relocation of indigenous and protected flora. - Though the habitats will remain relatively undisturbed due to the very low percentage footprint of activities planned, without prior knowledge of the whereabouts of the vulnerable, threatened and critically endangered species and their preferred habitat, it may not be possible to prevent an impact, regardless of how small it might be - Undertake Plant and animal Search and Rescue prior to the commencement of construction/operations. - Driving only on existing roads (national roads and roads created by the mine inside the gravel mining area. 				
--	--	--	--	--	--	--	--	--	--

								<ul style="list-style-type: none"> - Habitat loss for fauna and flora species should be kept to a minimum with footprint areas being restricted to the direct construction and operational areas only - In addition, where possible, construction and operational activities are to be aligned along previously disturbed areas. - No wandering around the site, collecting of plant species or hunting should be allowed. - Rehabilitation must restore the disturbed sites, as far as is possible to their prior state to mitigate the visual impact and to allow for the best possible re- colonization of the site, by plants and animals. 				
Exposure to soil erosion on exposed surfaces	Negative	Local	Medium term	Moderate	Likely	Yes	<ul style="list-style-type: none"> - Implement an Erosion Management Plan throughout the construction and operation Phase - Funds for rehabilitation should be set aside from the start of the operational phase 	Moderate (3)	Low (4)	4	High	

TABLE 8 - NOISE IMPACT ASSESSMENT TABLE

Impact	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Noise cause by project activities (Blasting, Machineries and vehicular movements)	Disturbance of sense of place and the effect on tranquil ambient noise levels Hearing problems to operators if noise generation is prolonged and not managed	Negative	Local	Temporary/ Permanent	Substantial/ Severe	Likely	Partially	<ul style="list-style-type: none"> - Potential noise sources during the mining activities could originate from vehicles, hammers, powered hand tools, excavators , blasting and drill rigs. The nuisance factor of these noise sources will depend on the proximity of the activities to the national road, homesteads and sensitive animal habitats. - For rural districts, the daytime ambient noise level requirement outlined in SANS 10103 (2008) between 6am and 10pm is 45dBA. This is in line with the guidelines published by the World Health Organization (WHO). - The Occupational Safety and Health Administration (OSHA) guidelines set legal limits on 	Very high (1)	Low (4)	3	Medium

								<p>noise exposure in the workplace. These limits are based on a worker's time weighted average over an 8 hour day. With noise, OSHA's permissible exposure limit (PEL) is 90dBA for all workers for an 8 hour day. The OSHA standard uses a 5dBA exchange rate. This means that when the noise level is increased by 5dBA, the amount of time a person can be exposed to a certain noise level to receive the same dose is cut in half.</p> <ul style="list-style-type: none">- The WHO guideline on maximum noise levels to prevent hearing impairment set noise level limits at an average of 70 dBA over a 24 hour period with maximum noise levels not exceeding 110 dBA during the period. These latter limits would apply if the day time shift is prolonged beyond the 8 hour day.- PPE is considered an acceptable mitigation, but a			
--	--	--	--	--	--	--	--	---	--	--	--



						<p>less desirable option to control exposures to noise.</p> <ul style="list-style-type: none"> - Limiting the amount of time, a person spends at a noise source. - Monitoring personnels' hearing, before, during (each year if employed longer than one year) and after employment, as a minimum. - Machineries and vehicles (moving and stationed) should be serviced regularly. - A noise management standard operating procedure (SOP) for the activities happening on-site should be developed - Avoid generating unnecessary noise by making sure that equipment that are not in use are always turned off and by avoiding operations during odd hours - Landowners should be informed prior drilling/blasting over the weekends or at other times not 				
--	--	--	--	--	--	--	--	--	--	--

							<p>outlined in this document.</p> <ul style="list-style-type: none">- It is recommended that any complaints regarding noise be recorded and included in the environmental reports. Should complaints persist then a survey by a suitably qualified and independent hygienist will be required.- Transportation routes should be planned for trucks such that they pass as far away as possible from noise sensitive receivers, a restriction of the hours of movement, e.g., not allowing the transport of material during the noise sensitive hours of the night can mitigate noise impacts- PPE is considered an acceptable mitigation, but a less desirable option to control exposures to noise.			
--	--	--	--	--	--	--	--	--	--	--

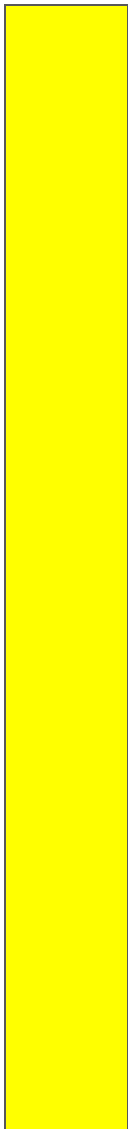
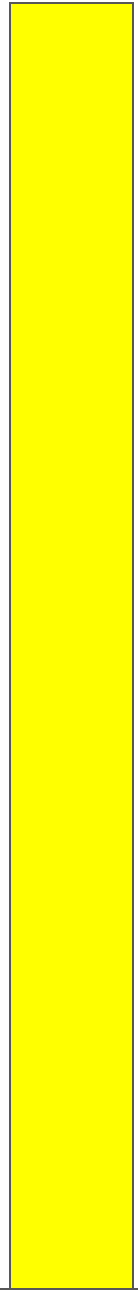


TABLE 9 - DUST IMPACT ASSESSMENT TABLE

Impact	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Dust generation during exploration and mining activities (e.g., blasting, vehicular movement, Crusher, sifting screens and conveyor functioning result in dusty conditions)	Tempering of the ambient air quality in the surrounding Fauna and flora alike could be impacted as ecosystem functioning is possibly affected	Negative	Local	Medium term	Substantial	Very Likely	Partially	<ul style="list-style-type: none"> Natural weather conditions can create very dusty atmospheric conditions. The small scale mining activities contribute very little to the widespread ambient conditions that often prevail. Cars travelling on the access roads can create dust plumes trailing behind them. Dust suppression techniques should be employed. However, this scarce resource cannot be applied continuously and indiscriminately. 	Moderate (3)	Low (4)	3	Medium

- Avoid activities that create excessive dust on extremely windy days.
- Personnel are required to wear personal protection equipment if excessive dust is created for prolonged working periods.
- Employees should be made aware of negative effects of dust inhalation.
- All vehicles transporting crushed material off site should be covered with a tarpaulin when travelling on the highways.
- Windbreaks and covers can be used to reduce lifting of dust from crushers, screens and conveyors.
- Water spays at the various plant components with effectively keep dust from



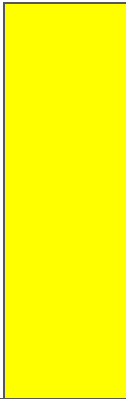
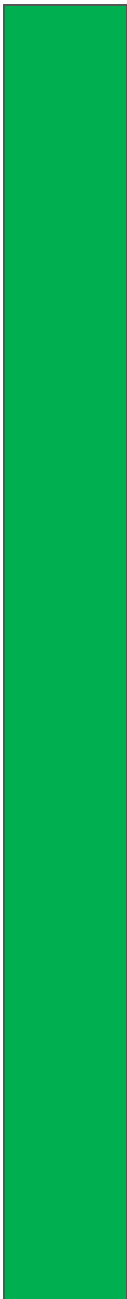
								<p>blowing into the atmosphere. The road network within the mine site can be sprayed with water and other dust suppressants during dry dusty conditions.</p>				
--	--	--	--	--	--	--	--	--	--	--	---	--

TABLE 10 - WASTE IMPACT ASSESSMENT TABLE

Impact Pathway	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Generation of waste during the proposed project activities	Domestic waste and waste from maintenance work performed on the machinery can potentially cause unpleasant odor, sight for the people in the surrounding as well as disturbance to surface and ground water	Negative	Local	Medium term	Moderate	Likely	Partially	<ul style="list-style-type: none"> - The domestic waste, which is separated from all paper and organic materials, is taken to the nearest official dumpsite. - Oil from the servicing of the vehicles and machines is collected in drums and is taken together with all other industrial waste that is generated on site to the nearest hazardous waste site. - A certificate of disposal needs to be kept on file. - Groundwater is a scarce and valuable resource in Namibia and must be protected at all costs. It must still be protected from pollutants since it can act as a conduit for the transfer of pollutants to secondary receptors such as the ocean. Additional boreholes are to be drilled to generate data about 	Moderate (3)	Very low (5)	4	Medium

the groundwater quality and quantity when exploration intensify.

- The proponent must follow the provisions of the Water Act so that they do not in any way damage the susceptible water resources
- Sewerage created at the camp or management offices either needs to be deposited directly into approved and permitted French drains or removed offsite. If the latter is to be done then sealed sewerage tanks are required. The regulations under the Water Resource Management Act need to be consulted with regards to the erection of French drains near water courses. They cannot be constructed within 100m of the banks of a water course.
- An oil water separator and wash bay could be constructed in conjunction with fuel dispensing to reduce costs and the concretised footprint. Regardless of this the oil water separator is a



								<p>requirement to ensure hydrocarbons do not enter the environment indiscriminately. The workshop also needs to be constructed on a sealed surface and have liquid waste sumps so that spills can be collected and removed from site on a regular basis. A sealed waste oil contain should be constructed at the vehicle workshop. Regular removal of oil to recyclers is advised. All hazardous liquid waste should be stored on sealed surfaces</p> <ul style="list-style-type: none">- Some wastes are dangerous to fauna and flora; Animals should not be able to access the waste management area; waste must be contained so that it cannot enter the naturally vegetated areas beyond the accessory works area.- Storage of hazardous liquid waste must by law follow industry standards. These standards will be communicated in fuller details by the		
--	--	--	--	--	--	--	--	---	--	--


								<p>fuel supplier. Ideally, self-110% bunded containers should be brought to site and placed upon sealed surfaces with waste collection sumps.</p> <ul style="list-style-type: none">- Soil which is contaminated by used hydrocarbons needs to be relocated to a remediation cell where the addition of fertiliser, air and water will within a year be suitable for re-use- Good housekeeping Training and awareness to contractors. Practice reusing, recycling of products.			
--	--	--	--	--	--	--	--	---	--	--	---

TABLE 11 - VISUAL IMPACT ASSESSMENT TABLE

Impact Pathway	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Visual impact caused by construction and operational activities	Changes to the aesthetic appeal of the area due to presence of people, vehicles and machinery as well as visible quarries Visible changes to habitats due to human activities	Negative	Local	Temporary	Moderate	Very likely	Yes	<ul style="list-style-type: none"> - As far as is possible existing roads and tracks are used to access target sites for mining - Personnel to be trained regarding the observable signs of faunal and floral biodiversity and the avoidance of habitat disturbance. - Minimize the footprint of personnel, vehicles and machinery. - Where new roads are constructed, the methods should be low intensive and possibly use manpower and not machines. - Careful planning to disturb significant floral and faunal habitats when accessing the mining site - Quarries should be levelled or possibly turned into earth dams which gently sloped sides once mining activities cease so as to restore the visual sense of place of the area to its natural state. - The remains of all structures that may have been erected at the quarry shall be demolished and 	High (2)	Moderate (3)	3	Medium

							<p>removed on completion of the project.</p> <ul style="list-style-type: none"> - Care must be taken to ensure that all rehabilitated areas are similar to the immediate environment in terms of visual character, vegetation cover and topography and any negative visual impacts will be rectified to the satisfaction of the MEFT officials. - Overburden topsoil will be placed back into excavation as part of the rehabilitation programme - Rehabilitate habitats through the removal of obvious signs of human presence. - Remove all waste daily and dispose of it in the appropriate manner. - Removal of machinery from the sites if periods of inactivity are protracted. 		
--	--	--	--	--	--	--	--	--	--

TABLE 12 - HERITAGE IMPACT ASSESSMENT TABLE

Impact Pathway	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Heritage sites destruction during prospecting and quarrying activities	Possible destruction to heritage sites	Neutral	Local	Long term	Substantial	Unlikely	Partially	- A 'chance find' of any potential heritage site should be communicated to the police and the National Heritage Council of Namibia. If activities occur at the location where a 'chance find' has been made, then the activities should cease until the necessary authorities have visited the site and provided the go ahead to proceed with activities. -	Moderate (3)	Low (4)	4	Medium

TABLE 13 – LANDUSE IMPACT ASSESSMENT TABLE

Impact Pathway	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Conflict with lands use of the area	Possible conflict with community during the implementation of the project (e.g., issues related to access and security)	Negative	Local	Short term	Substantial	Unlikely	Partially	<ul style="list-style-type: none"> - The mining claim is situated on land belonging to the government of Namibia granted to rural people in the form of communal land. The claims lie within the Okongo and Uukwaluudhi Conservancies. The area falls within the Ruacana and Opuwo Urban Constituencies. - The EMA requires that permission be provided by the competent authorities for the listed activity. - Update stakeholders register regularly - Actively engage landowners regularly to maintain open channels of communication - The proponent is subservient to the conditions laid down by the guidelines / 	Moderate (3)	Low (4)	4	Medium

							<p>conditions and the law that upholds it. The implementation of the mining programme will be in accordance with the approved Environmental Management Plan (EMP).</p> <ul style="list-style-type: none">- The communities of neighboring villages may claim to the grazing rights of the area. The leaders of the communities requested that the dangerous quarry area be made off limits to curious shepherd boys by means of fencing. This would also prevent livestock from unwittingly falling from the steep precipice.		
--	--	--	--	--	--	--	---	--	--

TABLE 14 - SOCIO ECONOMIC IMPACT ASSESSMENT TABLE

Impact Pathway	Nature of impact	Status	Spatial Extent	Duration	Consequence	Probability	Reversibility	Mitigation Measures	Significance of Impact = Consequence x Probability		Ranking of Impact	Confidence Level
									Without Mitigation	With Mitigation		
Exploration and quarrying activities related to the project	Employment creation	Positive	National	Long term	Slight	Very likely	Yes	<ul style="list-style-type: none"> - Where possible, local persons should be employed depending on the level of skills they have. - Employment will result should the project be permitted. - Promote local procurement of goods and services. 	Low + (4)	Very low + (5)	5	Medium

10. DECOMMISSIONING AND REHABILITATION

Disturbance of the earth's surface by quarrying activities may result in removal of existing vegetation and ecosystems within the disturbed area. The impacts are significant, but localized to the disturbed area, and the overall extent of the impact is determined by the concentration of the activity and the sensitivity of the disturbed ecosystems. The impact on the environment can be lessened by planning with future closure in mind. When a mining area is abandoned the infrastructure and altered landscape can affect the safe access of wildlife and public if not rehabilitated. The altered habitat may or may not promote the re-establishment of organisms once found there. Visual rehabilitation to the original state is not always practical due to economic factors.

The objectives of the closure and decommissioning are to:

- Provide a safe and stable landform compatible with the intended final use;
- Comply with relevant regulatory requirements and attain regulatory consensus on the successful closure and rehabilitation of the Project area;
- Complete the closure, decommissioning and rehabilitation works as quickly and cost effectively as possible whilst achieving primary objectives
- Produce a final “walk away” landform that is stable and that blends aesthetically into the surrounding landforms, yet as far as possible does not limit possible future land uses

10.1. SITE REHABILITATION

Proponent should keep the disturbed areas to a minimum, plants should not be removed unless necessary; selective quarrying should be adopted so that the entire site is not cleared and affected at once; backfilling the topsoil should be done as soon as possible where soil was removed, therefore topsoil should not be piled up for a long time as it will lose its natural nutrient content.

10.2. PLANNING FOR REHABILITATION

The proposed post quarrying land-use will also influence the procedure and the plant species used for rehabilitation

The following are the basic rehabilitation practices as summarized after the Minerals Council of Australia (1998), which with appropriate modifications, will apply to most disturbed areas.

1. Making Safe: After planning for rehabilitation, the first step is to clean up and make the area to be rehabilitated, safe. This involves the following:
 - Removal of infrastructure and unused or unwanted equipment. No facilities or equipment should remain on site unless with the written approval of the landowner or relevant authority.

- Removal of rubbish for disposal at approved sites. Care is required with residual toxic or hazardous materials including contaminated packaging and containers
2. Erosion Control: Progressive rehabilitation will be undertaken to stabilize disturbed areas as quickly as practical and to limit erosion.
- Restrict clearing to areas essential for the works
 - Windrow vegetation debris along the contour
 - Minimize length of time soil is exposed
 - Divert run-off from undisturbed areas away from the works
3. Topsoil Management: The rehabilitation strategy may include the following measures which are designed to minimize the loss of topsoil material respread on rehabilitated areas and promote successful vegetation establishment.
- Minimize the length of time that topsoil material is to be stockpiled.
 - Respread topsoil material in even layers at a thickness appropriate for the landform and land capability of the area to be rehabilitated.
 - Topsoil stockpiles are located in areas away from drainage lines or windy areas in order to minimise the risk of soil and wind erosion;
 - Rehabilitation areas of returned topsoil will be ripped, with care taken not to bring subsurface materials to the surface (e.g. large rocks). Ripping should only be sufficient to allow equipment to work efficiently. Ripping along slopes should be along contour.

11. CONCLUSION AND RECOMMENDATION

The aim of this environmental scoping assessment was to identify the potential impacts associated with the proposed exploration and quarrying activities on Mining Claims 2088 and 72089 to assess their significance and recommend practical mitigation measures. The public and all directly affected stakeholders were consulted as required by the EMA and its 2012 EIA Regulations (Section 21 to 24). The public was informed via the three newspapers advertisement used for this assessment. A one-on-one interaction (public meeting) was held for this project and there was no specific registration received.

Due to the limited scope of the proposed activities and the use of a step-by-step approach in advancing operations, the overall severity of potential environmental impacts of the proposed project activities on the receiving environment will be of medium magnitude, temporally duration, localized extent, and high probability of occurrence.

All impacts are provided with mitigation measures, minimized or avoided to acceptable degrees provided that the measures are put into consideration

Based on the conclusions of this EIA Report, it is thus recommended that an Environmental Clearance Certificate be provided for the planned project activities (ECC). When implementing the proposed program, the Proponent shall consider the following critical requirements:

- If applicable, the Proponent will negotiate Access Agreements with landowners.
- The Proponent is responsible for obtaining all additional permits that may be required.
- In accordance with all applicable national rules, the Proponent shall comply with all terms of the EMP and conditions of the Access Agreement to be signed into between the Proponent and the landowner/s.
- In cases where baseline information, national or international guidelines, or mitigation measures have not been supplied or do not adequately address the site-specific project effect, the Proponent must use the precautionary approach/principles.

REFERENCES

- Census, 2011. Population Housing Census, !Karas Regional Profile.
- Griffin, M, 2003. Checklist and provisional national conservation status of amphibians, reptiles and mammals known, reported or expected to occur in Namibia. Directorate of Scientific Services, Ministry of Environment and Tourism, Windhoek.
- Mendelson J, el Obeid S, 2005. Forests and Woodlands of Namibia, pp 148-152. RAISON
- Ministry of Environment and Tourism, September 2011. *A community information toolkit on adaptation*. Integrated Environmental Consultants Namibia. Windhoek, Namibia.
- NSA (Namibian Statistic Agency), 2014. Karas 2011 Census Regional
- Strohbach, B, J, (2001). Vegetation Survey of Namibia. Namibia Wissenschaftliche Gesellschaft, National Botanical Research Institution. Windhoek, Namibia, 49, 1018-7677.

APPENDIX A – ENVIRONMENTAL CONSULTANTS CV



LOVISA NANGULA AMWELE

ENVIRONMENTALIST (Cand.Sci.Nat)

ABOUT

I am a skillful environmentalist with an aggregate experience of over four (4) years in the field of environmental management/science/economics/health & Safety/ climate change /nature conservation and related sphere. I have been hard at work establishing my personal reputation as a mature critical problem solver and effective communicator driven by a strong set of ethical principles founded in social and environmental awareness. My objectives are to secure a challenging position, where I can utilize my abilities when granted the opportunity.

WORK EXPERIENCE



ENVIRONMENTAL OFFICER
GECKO EXPLORATION AND GEOKEY CONSULT CC
APRIL 2021 TO DATE

- Involvement in the writing and compilation of Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) reports for exploration and mining activities;
- Compiling of bi-annual environmental reports for exploration projects as a requirement by the Ministry of Environment Forestry and Tourism;
- Application for environmental clearance certificate renewals and writing environmental compliance report for exploration and mining projects;
- Application for water abstraction permits from the Department of Water Affairs
- Application and renewal of different Mineral Licenses from the Ministry of Mines and Energy.
- Various activities pertaining to environmental baseline and monitoring at various projects held by Gecko Namibia and Namibia Rare Earths;
- Enforce Environmental compliance as required by certain policies and standards
- Stakeholders communication
- Maps compilation using Geographic Information System (GIS) services as required for various projects using Google Earth, QGIS and ArcGIS;
- Project Management
- Implementation of Environmental Management Systems
- General administrative duties.

ASSISTANT ENVIRONMENTAL AND GIS PRACTITIONER
ENVIRONMENTAL COMPLIANCE CONSULTANCY (ECC)
FEBRUARY 2020 TO MARCH 2021

- Managing the company's Geographic Information System (GIS) services as required and compile professional maps for various projects using Google Earth and ArcGIS;
- Involvement in the writing and compilation of Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) reports for exploration, tourism, energy, biomass and construction activities;
- Application for environmental clearance certificate renewals and writing environmental compliance report for exploration and energy related projects;
- Liaise and communicate with clients and relevant stakeholders
- Project Management & General administrative duties.

PERSONAL DETAILS

NATIONALITY: Namibian
PASSPORT/ ID: P0974884/
93091000184
DRIVERS LICENCE: Code B

RESIDENTIAL ADDRESS:
Namibia : Etambo, Onguta

LANGUAGE PROFICIENCY
Oshiwambo - Excellent
English - Excellent
Afrikaans - Fair

PROFESSIONAL SKILLS



1. Computer skills: Microsoft word, outlook, power point, excel, publisher and Internet.
2. Programs: Google Earth, ArcGIS, QGIS, MATLAB, SDT, SanFuture

PERSONAL SKILLS



- Creative spirit
- Excellent Analytical and problem solving skills
- Reliable and professional
- Organized
- Team player
- Excellent communicator

CONTACT



P: +264 814351689
E: lovisanangula@gmail.com
P.O. Box 51006, Bachbretcht, WHK
Namibia

MEMBERSHIPS

Environmental Assessment Professionals of Namibia (EAPAN) - Emerging specialist and/or practitioner No. 224

International Association for Impact Assessment South Africa. No. 6542

South African Council of Natural Scientific Professions (SACNASP) No. 148697 (Cand. Sci. Nat)

REFERENCES

Oliver Krappmann
Geokey Consult CC & Gecko Namibia
T: +264 61 30 5444
E: oliver@gecko.na

Philip Hooks - EAP
Philip Hooks Consultant
Cell: +44 7340 238047
E: philip.nigel.hooks@gmail.com

Laina Wilhelm - Environmentalist
Environmental Compliance Consultancy
Cell: +264 81 438 2391
E: lainawilhelm@gmail.com

Emerita Ashipala - EAP
Earth Environmental Services
Cell: +264 81 701 6851
E: emerita.ashipala@gmail.com

Prof Karabo Shale - Faculty Research Manager - CPUT
C: +27 82 042 7485
E: shalek@cput.ac.za

CONTRACT ENVIRONMENTAL ASSESSMENT PRACTITIONER
PHILIP HOOKS ENVIRONMENTAL CONSULTANT

- Compilation of Environmental Impact Assessments (EIA) and Environmental Management Plans (EMP) for mining projects.

CONTRACT ENVIRONMENTAL ASSESSMENT PRACTITIONER
OMAVI GEOTECHNICAL & GEO - ENVIRONMENTAL CONSULTANTS CC :

- Compilation of Environmental Impact Assessments (EIA) and Environmental Management Plans (EMP) for various projects

ENVIRONMENTAL ASSESSMENT PRACTITIONER
EARTH ENVIRONMENTAL SERVICES

- Compilation of Environmental Impact Assessments (EIA) and Environmental Management Plans (EMP) for various projects

ENVIRONMENTAL MANAGEMENT INTERN
GECKO NAMIBIA (Pty) Ltd
JULY 2018 - JAN 2019

- Compiling of bi-annual environmental reports to comply with the requirement of Ministry of Environment Forestry and Tourism for exploration activities;
- Various activities pertaining to environmental baseline and monitoring at the Okorusu Fluorspar mine, the Imerys-Gecko Okanjande Graphite mine, Gecko Salt project and at the Opuwo cobalt project;
- Maps compilation for various projects using Google Earth and ArcGIS;
- Involvement in the writing and compilation of Environmental Impact Assessment (EIA) reports for exploration activities;
- Data entry, data organization with quality control;
- Liaise and communicate with clients and relevant stakeholders
- Data interpretation and verification;
- Site visits and various aspects of fieldwork at Gecko's mineral exploration projects
- Enforce Environmental compliance as required by certain policies and standards

DEPARTMENT STUDENT TUTOR
CAPE PENINSULA UNIVERSITY OF TECHNOLOGY :
JANUARY 2018 - NOVEMBER 2019

- Review class material with students by discussing text, working solutions to problems, reviewing worksheets and other assignments
- Determining student's needs for assistance in other areas such as counseling and refers as necessary
- Assessed the students progress throughout weekly tutoring sessions

ENVIRONMENTAL INTERN
ONIIIPA TOWN COUNCIL DEPARTMENT OF ENVIRONMENTAL HEALTH :
JUNE 2017 and DECEMBER 2017

- Business inspection to ensure compliance
- Training on food safety manual
- Risk assessment at work and public places
- Environmental pollution and monitoring control
- Waste management and health education

EDUCATION



MASTERS: ENVIRONMENTAL MANAGEMENT

Cape Peninsula University Of Technology - CPUT | Present

B-TECH: ENVIRONMENTAL MANAGEMENT

Cape Peninsula University of Technology - CPUT | 2019

ND: ENVIRONMENTAL MANAGEMENT

Cape Peninsula University of Technology - CPUT | 2016 to 2018

CERTIFICATIONS

RADIATION SAFETY OFFICER PART I

Namibian Uranium Institute | 2022

INTRODUCTORY EIA REPORT WRITING

International Association of Impact Assessment RSA | 2020

**SCHOLASTIC ACHIEVEMENTS
AND AWARDS**



2019: Best 4th Year Student (CPUT)

2018: Best 3rd Year Student (CPUT)

2011: Overall best student in 4 subjects at TUCSIN

2009: Exemplary Hostel girl (Otjikoto SSS)

2009 – 2010: Member of the Learners Representative Council and Hostel Prefect (Otjikoto SSS)

2008: Awarded Best top 10 performers in Grade 10 (Otjikoto SSS)

PROJECT EXPERIENCE

YEAR 2021

- **Environmental assessment practitioner | KNL of Namibia (Pty) Ltd** - EIA for the mining of blue sodalite dimension stone and other minerals, near Otjimuhaka, withing Mining License 40, Epupa constituency, Kunene Region.
- **Environmental assessment practitioner | Jacobus P Smit** - EIA for the proposed mining of Barite within Mining Claims 70070, 70071, 70072, 70073 on the Steilrand Mountains, northwest of Opuwo, Epupa constituency, Kunene region.
- **Environmental assessment practitioner | Gecko Namibia (Pty) Ltd** - Renewal of environmental clearance certificates for several mineral licenses held by Gecko Namibia.
- **Environmental assessment practitioner | Innosun** - Renewal of environmental clearance certificate for the 8MW wind farm close to the Elizabeth Bay Mine in !Karas Region
- **Environmental assessment practitioner | Votorantim Metals (Pty) Ltd** - Renewal of environmental clearance certificate for exploration activities on EPL 6521 in the Otjozondjupa region, Namibia.

YEAR 2020

- **Assistant environmental assessment practitioner | Imerys - Gecko Okanjande mine & Okorusu Fluorspar** - Scoping Report (with Assessment) for the Proposed Graphite processing plant at Okorusu Mine
- **Environmental assessment practitioner | Olivia Platt** - Environmental Scoping Assessment (ESA) Report for the Proposed Exploration and Quarrying of Slate Stone on Mining Claims 72110 and 72111, Hardap Region.
- **Environmental assessment practitioner | Olivia Platt** - Environmental Scoping Assessment (ESA) Report for the Proposed Exploration and Quarrying of Slate Stone on Mining Claims 72112 and 72113, !Karas Region
- **Environmental assessment practitioner | Namex Minerals** - Environmental Scoping Assessment (ESA) Report and Environmental Management Plan for minerals explorations activities on EPL 7304, Kunene Region.
- **Environmental assessment practitioner | Makarra Bushproducts cc** - EIA for the operation and construction of a charcoal and briquette processing and packaging facility in Otjiwarongo, Otjozondjupa Region, Namibia
- **Environmental assessment practitioner | Namchar** - EIA for the operation of a charcoal and briquette storage, processing, and packaging facility in Witvlei, Omaheke Region, Namibia
- **Assistant environmental assessment practitioner | Lighthouse Property** - EIA for the development of residential and retail (including tourism) activities on Erf 4747 in Swakopmund, Erongo region, Namibia
- **Assistant environmental assessment practitioner | Retort Charcoal** - EIA for the proposed construction of a biomass processing (charcoal retort system), storage and packaging plant on farm Gai Kaisa No. 159 in the Otjozondjupa region, Namibia
- **Assistant environmental assessment practitioner | Retort Charcoal** - EMP for the mechanized bush thinning operations on Farm Gai Kaisa No. 159 in the Otjozondjupa region, Namibia
- **Environmental assessment practitioner | B2Gold Namibia (Pty) Ltd** - EIA amendment for the construction of the B2Gold Namibia (Pty) Ltd 66 kV powerline in the Otjozondjupa Region, Namibia
- **Assistant environmental assessment practitioner | Alfacharcoal** - EIA for the operation of a charcoal production and storage plant held by Alfacharcoal in Outjo, Kunene Region, Namibia.

YEAR 2020 CONT.....

- **Environmental assessment practitioner | JSB Safari** - EMP for the bush control activities on farm Gembokoord no 477 Outjo district, Kunene region, Namibia.
- **Assistant environmental assessment practitioner | Olupale Lodge** - EIA for the development of the Olupale Lodge in the lipumbu Ya Tshilongo Conservancy, Oshana Region, Namibia.
- **Assistant environmental assessment practitioner | Driefontein Safari Lodge** - EIA for the development of the Driefontein Safari Lodge in the Torra Conservancy, Kunene Region, Namibia
- **Environmental assessment practitioner | Innosun** - Renewal of environmental clearance certificate for the 4.5MW AC solar park, located on farm Kristall No. 208, Omaruru in the Erongo Region, Namibia
- **Environmental assessment practitioner | Innosun** - Renewal of environmental clearance certificate for the 10MW AC wind farm, located on seal site at Luderitz, in the !Karas Region, Namibia
- **Environmental assessment practitioner | Innosun** - Renewal of environmental clearance certificate for the 5MW AC photovoltaic plant, located in Outapi, in the Omusati Region, Namibia
- **Environmental assessment practitioner | Innosun** - Renewal of environmental clearance certificate for the 5MW AC solar park, located on a portion of farm Osona Commonage 65, portion 82 near Okahandja, in the Otjozondjupa Region, Namibia
- **Environmental assessment practitioner | Weatherly** - The renewal application for an environmental clearance certificate for an existing antenna mast erected in 2008 on erf 617 in Olympia, Windhoek, Khomas Region

YEAR 2019

- **Environmental assessment practitioner | Kunene Resources (Pty) Ltd** - EIA for the exploration activities on EPL 5885 located on communal land South of Swartboisdrift, Opuwa town, Kunene region.

YEAR 2018

- **Assistant Environmental assessment practitioner | Swakopmund Salt Company (Pty) Ltd** - EIA for the solar salt operations at Cape Cross area which is approximately 120km north of Swakopmund. The Mining License 66D (ML66D) covers the industrial minerals commodity, salt.
- **Environmental assessment practitioner | Kunene Resources (pty) Ltd**- EIA for the exploration activities on for precious metals, base and rare metals, dimensions stones as well as industrial minerals on EPLs 6561 & 5992 which are located on communal land south and east of Grootfontein town.



***PROFESSIONAL
MEMBERSHIP 2022***

This is to certify that

Lovisa Amrwele

*Is a registered member of EAPAN under the following
membership category*

***“EMERGING SPECIALIST AND/ OR
PRACTITIONER”***

President

Secretary

Membership No: 224

Valid from 01 January 2022 to 31 December 2022



herewith certifies that
Lovisa Nangula Amwele
Registration Number: 148697
is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)
Environmental Science (Candidate Natural Scientist)

Effective **26 January 2022**

Expires **31 March 2022**



A handwritten signature in black ink, appearing to read 'Botha', written over a horizontal line.

Chairperson

A handwritten signature in black ink, appearing to read 'R. J. ...', written over a horizontal line.

Chief Executive Officer



To verify this certificate scan this code

CURRICULUM VITAE



Ms. Lydia Taakondjo Sylvi Kapolo

Citizenship: **Namibian** - ID No:**97050900788** - Gender: **Female**

CAREER PROFILE

Accomplished Geography and Environmental studies with a successful record in Environmental governance, spatial planning, urban planning, geography, sociology. I am dedicated, entrusted, fast learning and eager to work at various levels to enhance my skills. My main goal is to however gain high performance, knowledge and experience in order to enhance my professional goal. Transparency and integrity, communication, teamwork, accountability, delivering results as well as managing and sharing knowledge are principles that I hold.

+264 81 569 3966

lydiakapolo@gmail.com

PO Box 62, Onaanda

AWARDS & ACKNOWLEDGEMENTS

- ❖ Represented University of Namibia's sociology society in South Africa at University of Western Cape
- ❖ Have strong leadership skills thus was elected as vice-chairman of sociology society (on behalf of the sociology department in UNAM)
- ❖ Charity work at old age homes in Windhoek
- ❖ Assisted in initiating a non-profit organization for mobile schools in Opuwo rural

SPECIAL SKILLS AND EXPERIENCE

- ❖ Knowledge of Microsoft (Word, Excel, Access and PowerPoint)
- ❖ Experience in remote sensing with GIS capabilities
- ❖ Integrity and transparency
- ❖ Inclusion and respect for diversity
- ❖ Knowledge and experience in humanitarian assistance

INTERESTS & HOBBIES

- ❖ Traveling
- ❖ Socio-cultural interactions
- ❖ Charity work

LANGUAGES

ENGLISH (Fluent)
 OSHIWAMBO (Fluent)
 AFRIKAANS (Good)
 OTJIHERERO (Good)

EXPERIENCE

1. UNIVERSITY OF NAMIBIA

Period : Feb 2018 - Feb 2019
Position : Vice-Chairperson (Sociology Society)
Duties : Assisting in organizing school programs (Career fairs).
 Planning & Organizing fund raising events for charity.
 Ensuring that Chairman's schemes are completed.
 Assisting with administrative work (giving informal feedback, honest advice & a fresh perspective)

EDUCATION

Tertiary Qualification : Namibia University of Namibia
 : Honours Degree B. Arts Geography & Environmental Studies
Duration : 2016 – 2019
Secondary School : Canisianum Roman Catholic High School
Highest Grade : 12 (NSSC)
Duration : 2011 – 2015

REFERENCES


Ms. Lydia Kauari
 Sociology Lecturer
 UNAM
 Cell:+264 81 399 2143


Mr. Jona Heita
 Lecturer (UNAM)
 Department of Geo,
 History, Env. Studies
 Tel:+264 61 206 4707
 Cell: +264 464 2798


Mr. Elison Tjirera
 Lecturer
 Sociology
 UNAM
 Tel:+264 61 206 4342

APPENDIX B – ENVIRONMENTAL MANAGEMENT PLAN (EMP)

APPENDIX C – BACKGROUND INFORMATION DOCUMENT

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

BACKGROUND INFORMATION DOCUMENT

For the proposed development and small-scale mining activities for industrial minerals, within Mining Claims 72088, 72089 near Omakange

Kunene Region



MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

INTRODUCTION

Alliance Environmental Consultancy CC (AEC) (herein referred to as the consultant) has been appointed by Mr. Martin Demufawo Shaanika (herein referred to as the proponent) to act on their behalf in obtaining an Environmental Clearance Certificate (ECC) for the proposed development and small-scale mining activities on Mining Claims 72088, 72089. The project area is located near Omakange in the Kunene Region.

This site is accessible via tracks from the C35 road. The Mining Claims covers a total area of approximately 17100 square meters. Figure (1 - 2) gives a detailed layout locale for the site.

PURPOSE OF THE DOCUMENT

This document serves the purpose of informing interested and affected parties (I&AP) of the following:

- Proposed project location;
- Proposed activities pertaining to the project;
- The EIA process to be followed;
- How you can get involved.
- We hereby encourage all I&APs to submit their comment/inputs/concerns on the proposed project activities.

Your comments will add value and enrich the Environmental Impact Assessment (EIA) Report as well as the Environmental Management Plan (EMP) that will be submitted to the competent authorities for decision making.

ENVIRONMENTAL AUTHORIZATION

In terms of the Environmental Management Act No.7 of 2007 and the Environmental Impact Assessment (EIA) Regulations of 2012, the project triggers listed activities that cannot be undertaken without an Environmental Clearance Certificate (ECC). An environmental clearance application will be submitted to the Ministry of Mines and Energy (competent authority) and the Ministry of Environmental, Forestry, and Tourism (MEFT) for decision making before the commencement of the anticipated project activities.

The provision of the listed activities are as follows:

MINING AND QUARRYING ACTIVITIES

3.1 The construction of facilities for any process or activities which requires a license, right, or other forms of authorization, and the renewal of a license, right, or any other form of authorization in terms of Minerals (Prospecting and Mining Act), 1992.

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

3.2 Other forms of mining or extraction of natural resources whether regulated by law or not.

3.3 Resource extraction, manipulation, conservation, and related activities.

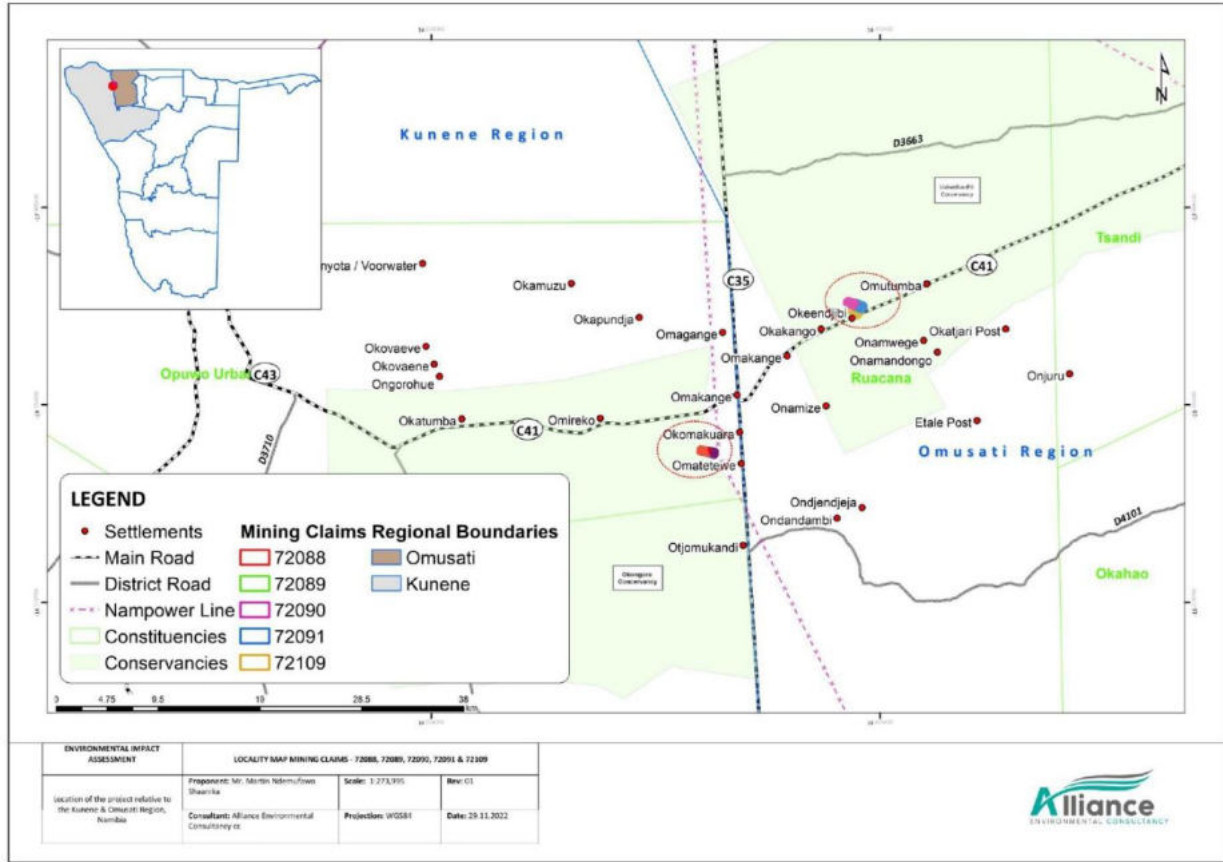


FIGURE 1 - PROJECT LOCALITY MAP

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

PROJECT MOTIVATION

Mining activities in Namibia are of great contribution to the country's revenue and one of the largest economic sectors in the country. Although the proposed small-scale mining activities will directly contribute to the economy of the local town and areas of proximity, the following are the possible benefits at a regional to national scale:

- Contributions to annual license fees to the government through the Ministry of Mines and Energy (MME).
- Payments of lease agreements and services rendered.
- Provisional contracting opportunity for companies interested in small-scale mining activities are carried out throughout the development and mining life operation of the proposed project (approximately 15 – 17 years).
- Provision of contractual employment opportunities.
- Increase in knowledge on the subsurface which then contributes to development, and geoscience research.
- Contribute to the socio-economic development and sustaining local businesses by means of purchases done during the mine's lifetime.

PROPOSED PROJECT PLAN AND ACTIVITIES

The projected small-scale mining activities are summarized as follows:

1. Small-scale mining activities include a desktop review of existing data as well as past area studies. This is conducted to understand the commodities in the area for extraction. This can be done by purchasing high-resolution data from the Government and interpreting it as part of the initial mineral study.
2. Regional reconnaissance assessment, which includes field-based activities such as regional mapping and sampling in order to identify and validate prospective targeted areas identified during stage 1.
3. Initial field-based activities such as widely distributed geological mapping, sampling, surveying, and maybe widely spaced trenching and drilling.

The proposed project involves the development and small-scale mining activities to extract industrial mineral dolostone aggregates. Dolostone aggregates are used in the construction of roads, bridges, buildings and canals etc.

Detailed local field-based operations such as localized site-specific detailed geology

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

mapping, trenching, bulk sample and surveying are carried out.

Small-scale mining is classified as such because of the simple setup, equipment and machinery used. Traditional methods of drilling, blasting, excavation and crushing techniques shall be conducted. The following is a summary of the envisaged project development process that will be implemented during the proposed mining activities:

- Planning and permitting
- Site preparation for the plant (with a capacity of approximately 50 000 cubic meters per day) and associated infrastructure.
- The machineries and equipment will involve the following: excavators, haul trucks, hammer crushers, screens, conveyers etc.
- Temporary camp for team if required may be established
- Supporting infrastructure, access, energy, and water supply.
- Decommissioning, final rehabilitation

ACCESS AND TRANSPORT

The location will be accessible through existing tracks from the C35 as far as practically possible. If the need to create new tracks arises, new access roads will

be assessed for any environmental sensitivity.

It is the Proponent's responsibility to negotiate access agreements with landowners and to ensure that all security measures to protect the land and the landowner's interests are always observed and as may be agreed upon with the landowners individually. Permission from landowners and appropriate authorities is required for any new tracks.

RESOURCES (WATER AND ELECTRICITY)

For the proposed activities, water will be brought to site as required. In addition, there is a burrow pit next to the site, which will reserve water (during the rainy season for use).

Should the company find suitable groundwater during the development of the site, a borehole may be used as a water source, provided the permission of the community is given and the necessary abstraction permit is attained from the Department of Water Affairs. , A hydrological study shall be conducted in support and only sustainable yields may be abstracted.

Diesel-powered generator and means of solar energy will be used as needed for

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

small-scale mining equipment and lighting for the project.

ACCOMMODATION, SUPPORTING INFRASTRUCTURE, AND SMALL-SCALE MINING METHOD

- The operation team will either be commuting from nearby settlements or will establish camp sites within the license area and with the permission of the community. The team is envisioned to consist of twenty-five (25) skilled and non-skilled workers.
- Portable toilets will be installed on-site and regularly serviced.
- Vehicles (especially pick up bakkies) and heavy machinery including drill rigs and trucks will be used during the course of the project.
- Waste will be collected and deposited to the nearest municipal dumpsite.
- Hydrocarbon tanks could be stored on-site. All hydrocarbon tanks will be appropriately stored and banded to hold 110% of the capacity of the tanks and all relevant permits should be applied for by the proponent as required (MME).
- The small-scale mining methods will be further described in the EIA scoping report.

ALTERNATIVES CONSIDERED

In terms of the Environmental Management Act, No. 7 of 2007 and EIA Regulations, alternatives considered should be analyzed. This is to ensure that during the design evolution and decision-making process, potential environmental impacts, costs, and technical feasibility have been considered, which leads to the best option(s) being identified.

Site Location

Minerals Occurrence Location: Several economic deposits are known to exist in various locations of Namibia, some of which have been explored by various companies throughout the years.

As part of the mineral rights, the proponent proposes to develop the economic minerals occurrences in these specific mining claims. There are no alternative locations considered for the proposed project.

Equipment and infrastructure

The equipment and infrastructure options considered by the proponent are deemed sufficient at this stage of the project. However, in the world of revolving technology, the proponent may opt to employ other improved equipment/infrastructure in the future when deemed necessary in order to maximize the project output.

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

ENVIRONMENTAL ASSESSMENT PROCESS AND STEPS

The EIA and EMP methodology applied for this project takes into account the provisions of the Environmental Impact Assessment (EIA) Regulations, 2012, and the Environmental Management Act (EMA) Act No. 7 of 2007. The process followed is detailed below and in Figure 2,

- a. Preparation of the Background Information Document (BID).
- b. Project registration or notification through the MEFT online Portal (www.eia.mef.gov.na) or hand submission to the DEA.
- c. Project screening process.
- d. Preparation of the public notice to be published in two local newspapers twice for two consecutive weeks as well as site notices as part of the public consultation process as well. This process runs for (21 days) from 01st November 2022 – 22nd November 2022 for this project. A public and information sharing meeting is planned for the 19th November 2022. However, comments received after the stipulated period and before submission to the competent authority are also welcome.
- e. Preparation of the first Draft EIA/ Scoping and EMP Reports for client review, public and stakeholder inputs.
- f. Incorporation of comments and inputs from the client and I&APs into the reports for finalization.
- g. The final EIA/ Scoping and EMP reports are submitted to the competent authorities and the Environmental Commissioner in fulfilment of all the requirements of the Act and its Regulations.
- h. Stakeholders who are interested or affected by the proposed project will have additional fourteen (14) days to submit comments directly to the Environmental Commissioner (EC). The application will be made available for additional comments on the MEFT digital Portal www.eia.mef.gov.na.
- i. If the EC requires additional information about the project, the environmental practitioner will be alerted. Once provided-
- j. Wait for the Record of Decisions.

The process is also depicted in the diagram presented in Figure 3.

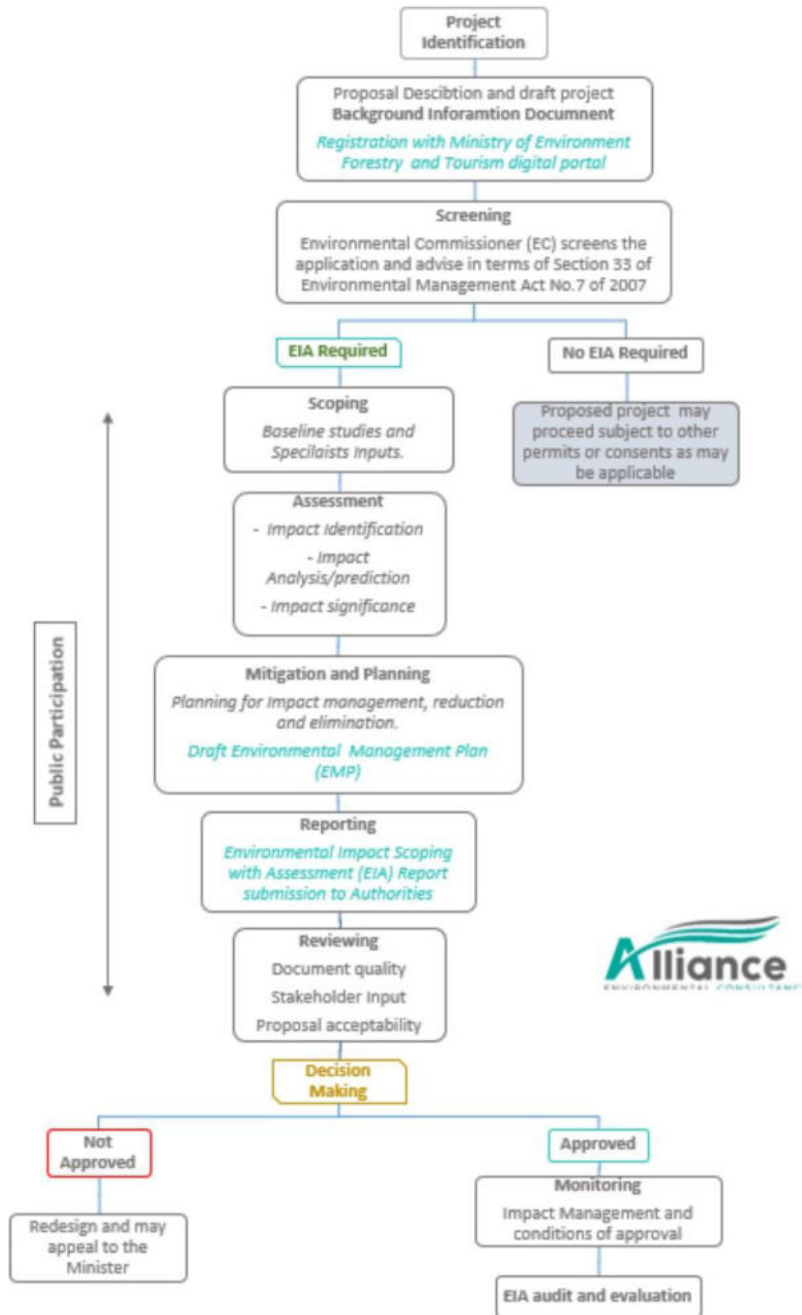


FIGURE 2 - EIA FLOW CHART BY AEC

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

EVALUATION OF POTENTIAL ENVIRONMENTAL IMPACTS

Impacts are assessed and evaluated to identify the most pertinent environmental impacts by describing certain quantifiable aspects of these impacts and to provide possible mitigation measures to avoid and/or minimize the magnitude of the impacts that are possibly deriving from the various activities that constitute the proposed mining activities by the proponent.

The identification of potential impacts included impacts that may occur during the development phases of the project. The assessment of impacts includes direct, indirect as well as cumulative impacts. In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed projects is well understood so that the impacts associated with the projects can be assessed.

The process of identification and assessment of impacts includes:

- Determining the current environmental conditions in sufficient detail to establish a baseline against which impacts can be identified and measured.

- Determining future changes to the environment that will occur in a case where the activity does not proceed.
- Develop an understanding of the activity in detail to understand its consequences; and
- The identification of significant impacts which are likely to occur if the activity is undertaken.

The following potential impacts on the social environment during the development and small-scale mining activities have been identified below and further discussed in the table that follows:

- Dust & Noise
- Health & Safety
- Visual
- Waste
- Ecological
- Groundwater and surface water
- Heritage & Socio-Economic

POTENTIAL ENVIRONMENTAL ISSUES AND MITIGATION MEASURES

The following table summarizes the potential environmental impacts associated with the proposed project.

POTENTIAL IMPACTS
NEGATIVE
- Possible destruction of vegetation and fauna through disturbance of the surface
- Mining projects if not proceeding with necessary precautions are likely to cause soil and water contamination, due to hazardous chemical spills and leaks from machinery/ heavy vehicles
- Noise pollution from sources such as power generation, drill rig operations, heavy vehicle engines as well as other sources
- Air pollution from the emission of carbon dioxide by machinery during the mining activities
- Mining activities are accompanied by machinery and camping which are foreign to the environment and therefore causes a visual impact to the environment and the community members.
- Possible disturbance to heritage/historically important area of interest.

POSITIVE
- The project will positively contribute to the socio-economic development of the country by creating wealth, job creation, the country's GDP through tax and license payments
- This proposed project will however also contribute to achieving the country's national goals of poverty reduction through skills and human development (improving living conditions of locals)

Any negative environmental impacts that will arise from the proposed activities will be substantially minimized, avoided, and/or mitigated in accordance with the Environmental Management Plan (EMP) and the best industry practices.

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

PUBLIC PARTICIPATION PROCESS

Public participation is the cornerstone of the Environmental Impact Assessment process. These include the ongoing provision of sufficient information (in a transparent manner) to Interested and Affected Parties (I&APs). During the public participation process, I&APs will be given the opportunity to comment on the findings of the reports, during the specified comment periods.

I&APs are hereby invited to comment on environmental, social, and economic issues relating to the proposed project. The inputs from a broad variety of stakeholders will complement the EIA.

MINING CLAIM 72088,72089

BACKGROUND INFORMATION DOCUMENT

GET INVOLVED

To ensure that you are registered as an Interested & Affected party, complete the form with your comments, issues/concerns below and forward it to info@enviro-aec.com

Your involvement is highly appreciated

FOR THE PROPOSED DEVELOPMENT AND SMALL-SCALE MINING ACTIVITIES FOR INDUSTRIAL MINERALS, WITHIN MINING CLAIMS 72088,72089 NEAR OMAKANGE, KUNENE REGION

REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES

<i>DETAILS OF THE INTERESTED AND AFFECTED PARTY</i>	
FULL NAME:	
NAME OF ORGANIZATION:	
POSTAL ADDRESS:	POSTAL CODE:
STREET ADDRESS:	POSTAL CODE:
TELEPHONE NUMBER:	FAX NUMBER:
CELL PHONE NUMBER:	E-MAIL ADDRESS:
INTEREST IN THE PROPOSED PROJECT:	
COMMENTS/QUESTIONS:	

APPENDIX D – ADVERTS, SITE NOTICES, STAKEHOLDER LIST/ATTENDANCE REGISTERS AND MEETING MINUTES

NEWSPAPER ADVERTS

TUESDAY 1 NOVEMBER 2022

Market Watch

Republiek Sun Allgemeine Zeitung 7

Market Watch

Kleinadvertensies • Classifieds

SPERTYE: 13:00 TWE WERKSDAE VOOR PLASING
DEADLINES: 13:00 TWO WORKING DAYS PRIOR TO PLACEMENT

TEL: 061*297 2175 FAX: 061*239 638
EMAIL: classifieds@synergi.com.na

Geen advertensies sal telefonies aanvaar word nie.

No advertisements will be accepted telephonically.

Table with 2 columns: INHOUDSOPGAWE and CONTENTS. Lists various categories like Sterfgevallen, Vakatures, and Rates & Deadlines.

Betrekkings gevra Employment Wanted

008 BELINDA (34) is op soek na huiswerk of kantoorboekmaakwerk van Maandag tot Vrydag.

Vakatures Vacancies

VACANCIES: TUTORS: Designation: Tutors. Number of Positions: (Twelve) 12 Subject(s): 2x Mathematics, 2x Biology, 2x Chemistry & Physics, 2x Agriculture, 2x English, 2x Geography, History & Development Studies.

Spesiale dienste Services

ECONOMIX RENOVATIONS CC: For all your building, renovations, painting, tiling, roof sealing, plumbing, welding and many more.

Bou en verf Construction

SPECIALS, SPECIALS, SPECIALS! Adrian Oberholzer: Building & renovations. Specializes in roof sealing, painting, plumbing, building, paving, welding, etc.

To huur To Let

TO LET: OTTOMOUSE (MAIN-STAY) COMPLEX: Newly renovated 2 bedroom ground floor unit.

Motors Vehicles

BUSES FOR SALE: 2x Scania 45-seaters with air-con. Offers will be accepted.

Besighede Businesses

ARRIKI CONSTRUCTION & ELECTRICAL: Electrical installations, geyser installations and repairs.

Erwe te koop Erven for Sale

NEW DEVELOPMENT: 10 Minutes before Windhoek. Choose your plot and let's build your dream house for you.

Regskeningsgewings Legal Notices

IN THE High Court of Namibia, Northern Local Division. Held at Oshakati. Case No: HC-ND-CIV-ACT-CON-2022/00204

Regskeningsgewings Legal Notices

IN THE High Court of Namibia. Main Division, Windhoek. Case No: HC-MD-CIV-ACT-CON-2022/01543

To huur To Let

TO LET: OTTOMOUSE (MAIN-STAY) COMPLEX: Newly renovated 2 bedroom ground floor unit.

Motors Vehicles

BUSES FOR SALE: 2x Scania 45-seaters with air-con. Offers will be accepted.

Besighede Businesses

ARRIKI CONSTRUCTION & ELECTRICAL: Electrical installations, geyser installations and repairs.

Erwe te koop Erven for Sale

NEW DEVELOPMENT: 10 Minutes before Windhoek. Choose your plot and let's build your dream house for you.

Regskeningsgewings Legal Notices

IN THE High Court of Namibia, Northern Local Division. Held at Oshakati. Case No: HC-ND-CIV-ACT-CON-2022/00204

YOU ARE SOMEONE'S TYPE DONATE BLOOD HAPPY SPRING! Tuesday, 1 November 2022. Wednesday, 2 November 2022. NAMBTS donate life.

In tere herinnering aan Charles Peter Herbert *12 September 1937 *26 Oktober 2022. NAMBBOB.

In joufhele Herinnering Louisa Maria Reid. Kerkdiens 05/11/2022. 10:00 NG Kerk Suiderhof.

RATES & DEADLINES. To avoid disappointment of an advertisement not appearing on the date you wish, please book these early. Classified small, notices and display small: 13.00, two working days prior to placing.

BOOK & PAY FOR YOUR CLASSIFIED ADS ONLINE. Visit https://classifieds.synergi.com.na

TODAY IS... AUTHOR'S DAY. If you know the joys of raising 'Little Women', you've ridden on a cart with my Hick Fics. You read all the books of Stephen King and lost your will with 'Things to remember to do with your car'.

Market Watch

Kleinadvertensies • Classifieds

SPERTYE: 13:00 TWEE WERKSDAE VOOR PLASING
DEADLINES: 13:00 TWO WORKING DAYS PRIOR TO PLACEMENT
Geen advertensies sal telefonies aanvaar word nie.

TEL: 061*297 2175 FAX: 061*239 638
EMAIL: classifieds@synergi.com.na
No advertisements will be accepted telephonically.

INHOUDSOPGAW E CONTENTS

Table listing various categories such as 001 Sterfgevalle, 002 In Memoriam, 003 Dankbetuigings, 004 Verlede, etc.

RATES & DEADLINES

To avoid disappointment of an advertisement not appearing on the date you wish, please book...
RATES: (Monday - Friday) Classifieds Small: NS105 for the first 20 words...

BOOK & PAY FOR YOUR CLASSIFIED ADS ONLINE

Visit https://classifieds.ny.net to log in via your my account and follow the easy steps to upload your classified ad.

CUPPUCCINO DAY
Today is...
Italy is famous for the variety of coffee it produces. Cappuccinos are loved among coffee lovers and despite its vague history many people still appreciate the comfort it brings.

005 Kennisgewings Notices

DEATH, FUNERAL COVER Love is caring even after death do us part. Get N\$100,000 death or funeral cover for only N\$150 p/m, depending on age and smoking habit.

009 Vakatures Vacancies

SHINE TECHNOLOGIES SOLUTIONS (PTY) LTD has the following vacancies: 1. Senior technical consultant position, minimum requirement: * Diploma / degree in ICT (Computer Science, Information Systems, Technology and Engineering) or related field.

008 Vakatures Vacancies

ASSISTENT BESTUURSOFFISERS Burgsdorf Gastepale geleë nabu Maltahoe. Vereistes: ondevinding in toerisme, goeie mensverhoudings en kommunikasie vaardighede.

009 Vakatures Vacancies

PROJECT & PROGRAMME ADMINISTRATOR / FACILITATOR Wilderness Therapy Namibia Wilderness Therapy Namibia was established in 2008 as a faith based alternative therapeutic intervention method to facilitate change in the lives of troubled youth and youth at risk.

013 Vakatures Vacancies

Bau en verf Construction SPECIALS, SPECIALS, SPECIALS! Adriaan Oberholzer: Building & renovations. Specializes in roof sealing, painting, plumbing, building, paving, wetting, etc.

009 Regskennisgewings Legal Notices

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CO-2022/0960 In the matter between: BANK WINDHOEK LIMITED, Plaintiff and SAKAJA AMBUGA, Defendant Rule 7(1) COMBINED SUMMONS

005 Regskennisgewings Legal Notices

Soweto, Windhoek, Republic of Namibia (hereinafter called the Defendant). THAT BANK WINDHOEK LIMITED, with Registered Address 262 INDEPENDENCE AVENUE, WINDHOEK, Namibia, Republic of Namibia, (hereinafter called the Plaintiff), hereby institutes action against the Third Defendant, for the following relief: WHEREFORE PLAINTIFF CLAIMS AGAINST THE DEFENDANT FOR: 1. Payment in the amount of N\$63 299.76.

009 Regskennisgewings Legal Notices

PUBLIC NOTICE: ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED EXPLORATION & MINING ACTIVITIES WITH-IN MINING CLAIMS 72088, 72089, 72090, 72091 & 72109, OMAUATI & KUNENE REGIONS On behalf of the proponent, Alliance Environmental Consultancy (AEC) herewith gives notice in terms of the Environmental Management Act No. 7 of 2007 and Environmental Impact Assessment (EIA) Regulations for the proposed mining activities within Mining Claims 72088, 72089, 72090, 72091 & 72109.

009 Regskennisgewings Legal Notices

ON BEHALF OF THE DEFENDANT further that if he disputes the claim and wish to defend the action he must: 1. Within 10 days of the service on him of this summons file with the Registrar of the Court at High Court of Namibia. (Main Division) WINDHOEK notice of his intention to defend and serve a copy thereof on the Plaintiff's legal practitioner, which notice must give an address (not being a post office box opposite restaurant) referred to in Rule 14(3) (b) for the service of the defendants of all notices and documents in the action, but if the Defendant chooses to have further pleadings served on him by way of electronic means, such electronic address must be provided to the Plaintiff in the Notice of defence.

009 Regskennisgewings Legal Notices

Market Watch
New and exciting way of letting your advertisement stand out above the rest, now at an additional N\$5.00 per placement, get your classified heading in COLOUR!
Market Watch

005 Regskennisgewings Legal Notices

number, facsimile number and personal or workplace emailaddress or both. 3. The particulars provided in terms of Item 2 remain binding on the parties to which they relate and may be used by the court, or by the other party to effect service of any notice or document on such party or give notice to such party. 4. As soon as the managing judge has given notice of a case planning conference in terms of Rule 23(1), he or she is required to meet with the Plaintiff in order to agree a case plan in terms of Rule 23(3) for submission to the Managing Judge for the exchange of pleadings, and the time within which he or she must deliver his or her plea and counterclaim, if any, will be determined by the court having regard to such plan and if he or she fails to cooperate in submitting such plan, the court will determine the time within which he or she must deliver his or her plea and counterclaim, if any, and he or she must comply with such order.

009 Regskennisgewings Legal Notices

PUBLIC NOTICE: ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED EXPLORATION & MINING ACTIVITIES WITH-IN MINING CLAIMS 72088, 72089, 72090, 72091 & 72109, OMAUATI & KUNENE REGIONS On behalf of the proponent, Alliance Environmental Consultancy (AEC) herewith gives notice in terms of the Environmental Management Act No. 7 of 2007 and Environmental Impact Assessment (EIA) Regulations for the proposed mining activities within Mining Claims 72088, 72089, 72090, 72091 & 72109.

009 Regskennisgewings Legal Notices

Market Watch
Om te adverteer skakel:
Kleinadvertensies t: 061-297 2055

SITE NOTICES PLACED AT THE OMAKANGE CONSERVANCY HALL



REGISTERED AND IDENTIFIED STAKEHOLDER IST

ORGANIZATION/AUTHORITY	CONTACT PERSON	CAPACITY
Ministry of Agriculture, Water & Forestry: Forestry Directorate	Mr Natanael Amadhila	Chief Regional Forester
Ministry of Mines and Energy	Mr Shivolo Erasmus	Mining Commissioner
Ministry of Environment and Tourism	Mr Timoteus Mufeti	Environmental Commissioner
Omusati Regional Council		
Okongoro Conservancy		
Uukwaluudhi Conservancy		
Uukwaluudhi Constituency	Johannes Shaanika (Chairperson) –	0812807623
Ruacana Constituency		
NamWater	Mr. Du Plessis NP	Environmental
NamPower	Ms Haihambo Nadia	Environmental
Roads Authority	Mr. Rutz Jackie	Area Manager


PUBLIC MEETINGS ATTENDANCE REGISTERS (BOTH SESSIONS)

Summary of the public participating meeting that was undertaken on the 19th of November 2022 at Uukwaluundhi Conservancy Office Hall, Omakange village. In a nutshell, the meeting was well attended, by both Traditional Authority (TA) leaders and community at large. In order to ensure that all critical issues/concerns are well captured, the meeting was subdivided into two (2) sessions, session one (1) with the TA leaders, while session two (2) was attended by the general public - and also three (3) Senior TA leaders. Below are the key issues/concerns that were raised during the meeting:

Identified key I&APs that were not present at the meeting, but need to be consulted:

- a) Uukwaluundhi Conservancy, Omusati Region – Johannes Shaanika (Chairperson) – 0812807623
- b) Okongoro Conservancy, Kunene Region
- c) Omusati and Kunene Regional Councils
- d) Omakange Stone Committee Group – need to be consulted
- e) MAWRD – Omakange office

ATTENDANCE REGISTER



+264 81 435 1889 | +264 85 772 8929 | info@alliance.co.na
Postal Address: P. O. Box 51006, Bachibuitch, Windhoek, Namibia

PROJECT: Development & small-scale mining for industrial minerals MCs 72088, 72089, 72090, 72091 & 72109

VENUE: Uukwalundhi conservancy office

DATE: 19/11/2022 TIME: 9:30

	NAME & SURNAME	ORGANIZATION	TEL/CELL NUMBER	EMAIL ADDRESS
1	Titus SHUUYA	AEC	0853013777	titus.shuuya@gmail.com
2	WILHARD Isak	N/A	0813115480	
3	ISAK Wilbard	N/A	0812448456	
4	JOSEPH Lilongwe		08140450423	
5	Michael Cleofas	ELECTION	0816666404	
6	DAVID Immanuel	Handmen	0817284439	
7	Gustaph Bimbica	Handmen	0813980095	
8	JASON ANGALA	Special advisor to headmen	0814549348	angalab72@gmail.com

ATTENDANCE REGISTER



+264 81 435 1689 / +264 85 772 8928 info@enviro-acc.com

Postal Address: P. O. Box 51006, Bachbretzt, Windhoek, Namibia

9	Joseph Wilhelm	Community Contact	0812047425	Joseph Wilhelm
10	ALPHEUSSALMON	N/A	0812289223 0817576781	
11	Hijambua Kavara	M/A	0817711005	James
12	Uasuviruo Kavara	M/A	0813852651	
13	Sebastiao ^{Nakale}	N/A	0813778716	Hilander
14	Kagiti Kandi	Step by step	0813942462	Kandi
15	Tuyeni Tuulike	N/A	0812724628	
16	Selma A Imalwa	N/A	0812979242	
17	K Joseph		0813509541	
18	Tjuna Rachel	N/A	0818011446	
19	Tjhatara Lubeni	N/A	0812107070	
20	Bonifatus Hildhose	N/A	0812213753	
21	Tjharuka Kavisa	N/A	0814040977	

ATTENDANCE REGISTER



+264 61 435 1689 / +264 85 772 8929 info@enviro-acc.com

Postal Address: P. O. Box 51005, Bachbretcht, Windhoek, Namibia

22	Tiharuka Kavetira	N/A	0814020977
23	Tiposa Natjidisa	N/A	0813767112
24	Venteka Igwora	N/A	N/A
25	Mathews Sibano Wilka	N/A	081 6128902
26	Shaakumeni Eng	N/A	0813202577
27	Elago Slawi	N/A	0817071673
28	Upuleni R	N/A	08156432114
29	LUCAS F	N/A	0815802646
30	TIMOTHY JOSHUA	N/A	08165096
31	Nicke Kakuna	N/A	0818374281
32	Jozikee Tiharuka	N/A	0817106251
33	Munika Kasupi	N/A	0817106251

ATTENDANCE REGISTER

Alliance
ENVIRONMENTAL CONSULTANCY

+264 81 435 1589 / +264 85 772 8929 info@emwco-acc.com
Postal Address: P. O. Box 51005, Bachibretsch, Windhoek, Namibia

PROJECT: Development of small-scale mining for industrial mineral MCs 72088, 72090, 72091 and 72107

VENUE: Ilubwaluudhi Conservation office

DATE: 19/11/2022 TIME: 12:30

	NAME & SURNAME	ORGANIZATION	TEL/CELL NUMBER	EMAIL ADDRESS
1	Jhu FN Shomungala	N/A	0814444026	Jhu.C
2	Juujju Uhejajiri	M/A	0817617285	Juujju
3	UNWA Mumbuu	N/A	0814884305	
4	Sophia Paulus	N/A	0812846070	
5	Kamaaga Jauwe	M/A	0818654121	
6	Justina Angula	M/A	0818663453	
7	Aletia Tijimubika	N/A	0816599189	
8	Willard Troteus	N/A Drawe	0812592182	

ATTENDANCE REGISTER

Alliance
ENVIRONMENTAL CONSULTANCY

+264 81 435 1689 | +264 85 772 8923 | info@emwo-acc.com

Postal Address: P. O. Box 51006, Bachbretcht, Windhoek, Namibia

9				
10	Julia Lukas	N/A	0810364223	
11	Euboni Ndakulima		0814237799	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				

POWER POINT PRESENTATION



Proposed development and small-scale mining activities for industrial minerals, within Mining Claims 72088, 72089, 72090, 72091 & 72109 near Omakange, Omusati & Kunene Regions

Public Participation Meeting

19th November 2022

Environmental Assessment Practitioner

Titus Shuuya, Mr

OUTLINE

1. INTRODUCTION

- Project Background
- Purpose of the Proposed Project
- Environmental Requirements

2. PROPOSED PLANNED ACTIVITIES

3. SUPPORT INFRASTRUCTURE, EQUIPMENT & SERVICES

4. NEED AND DESIRABILITY OF THE PROJECT

5. ENVIRONMENTAL IMPACT ASSESSMENT

6. PUBLIC PARTICIPATION PROCESS

7. QUESTIONS & COMMENTS

INTRODUCTION

Alliance Environmental Consultancy CC (AEC), “the consultant” has been appointed by Mr. Martin Demufawo Shaanika, “the proponent” to assist with the application process for an Environmental Clearance Certificate (ECC).

The proponent proposes to development a small-scale mining project for industrial mineral on Mining Claims 72088, 72089, 72090, 72091, specifically with interest in:

- Dolostone aggregates - used in the construction of roads, bridges, buildings and canals etc.



INTRODUCTION cont...

Mining and quarrying are listed activities, hence:

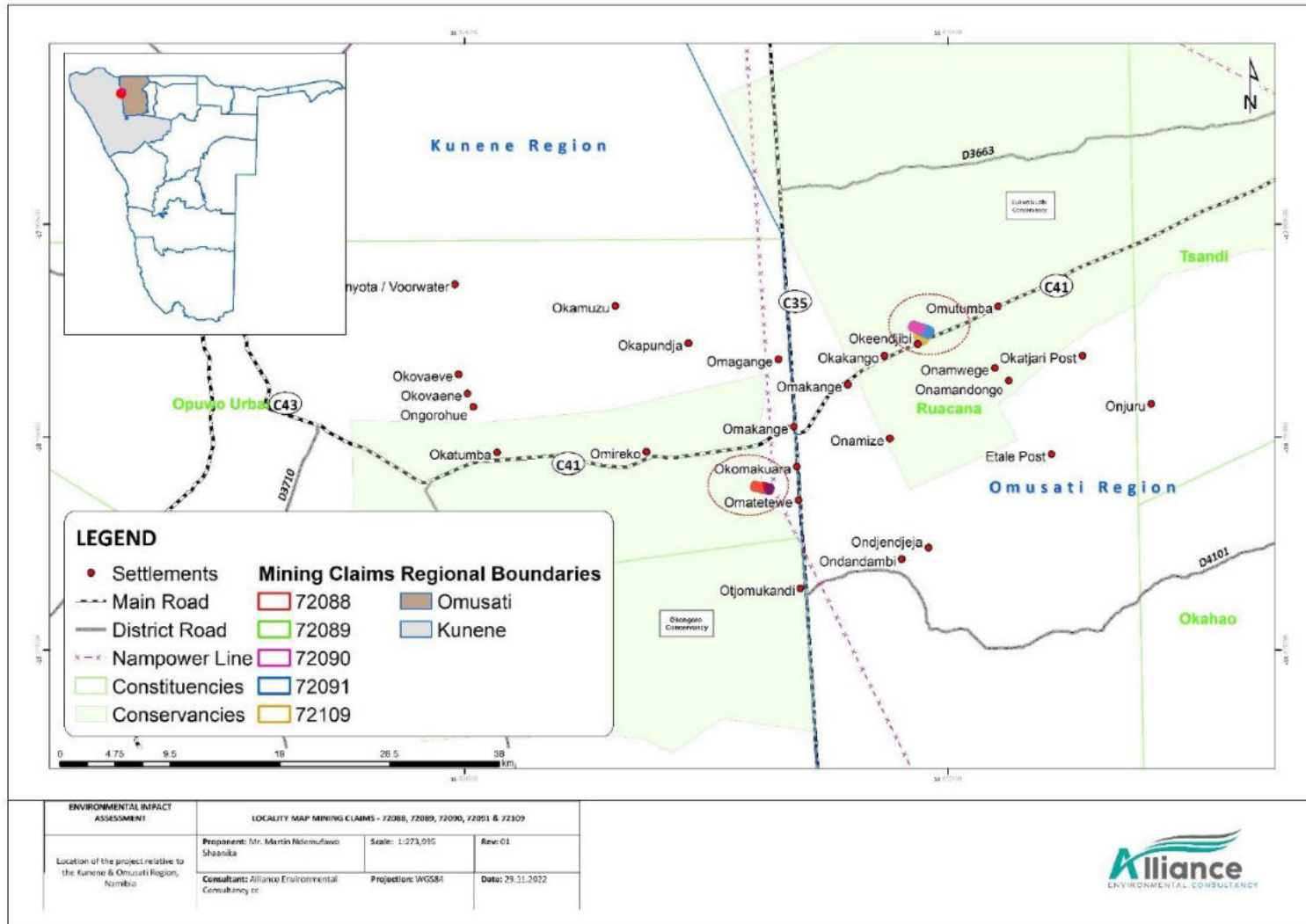
- An Environmental Impact Assessment (EIA) should be conducted as per the Environmental Management Act, No. 7 of 2007 and its 2012 EIA Regulations:
 - a processes that includes public participation;
 - it identifies and analyses potential positive and negative impact on the environment and social safeguards related to a project;
 - summarized in the scoping report and Environmental Management Plan (EMP);
 - Inform decision making by the competent authority to approve or not approve the ECC.

INTRODUCTION cont...

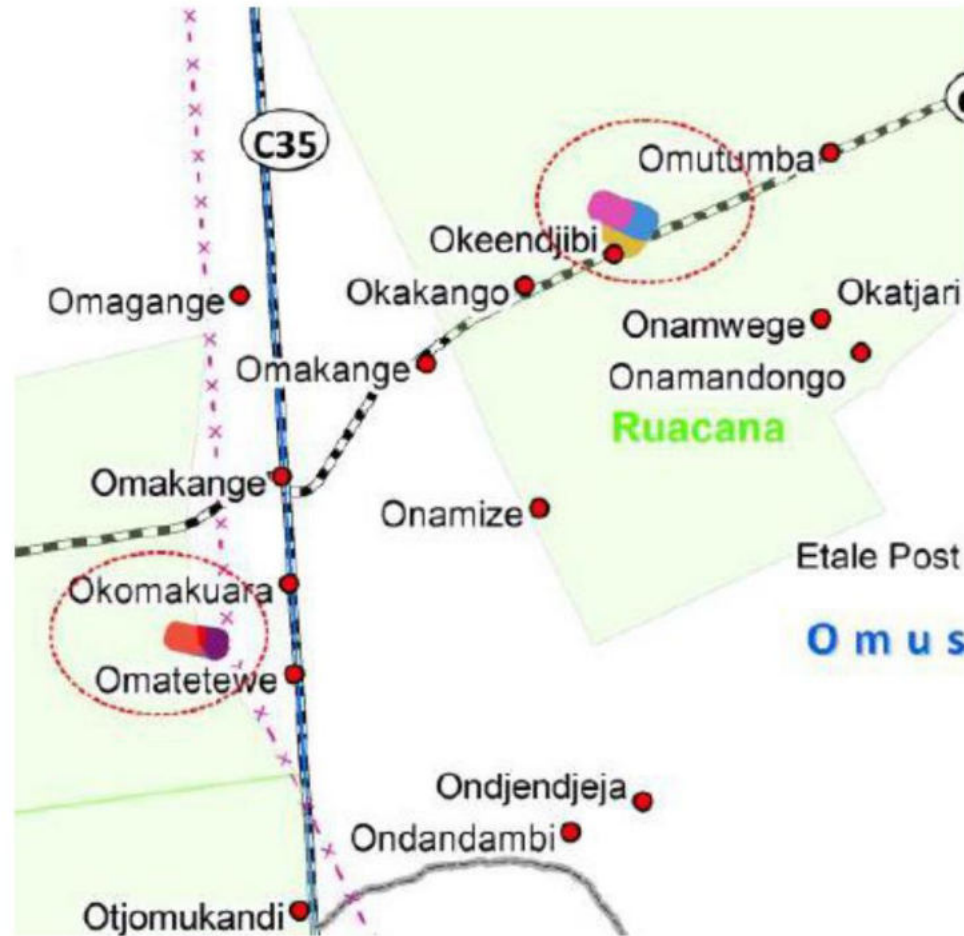
Purpose of an EIA

- Introduce the proposed project and related activities to potential Interested and Affected Parties (I&APs);
- Provide information about the EIA process and how I&APs can be involved/register;
- **Thereafter, identify, assess and formulate** appropriate management actions required to **avoid, minimise or mitigate** the negative impacts; or to **enhance the benefits** of the project.

PROJECT LOCATION



PROJECT LOCATION cont...



Located in the Okeendjibi and Omatetewe areas near Omakange. It covers an area of ~ 17100 Ha. Accessible via tracks from C35 road.

7

PROPOSED PLANNED ACTIVITIES

The projected small-scale mining activities are summarized as follows:

- Desktop review of existing data as well as past area studies – to understand the commodities.
- Regional survey e.g., field-based, mapping, sampling trenching and drilling for validation purposes.
- Detailed local field-based operations such as localized site-specific detailed geology mapping, trenching, bulk sample and surveying are carried out.
- Traditional methods of drilling, blasting, excavation and crushing techniques shall be conducted.

Summary of the envisaged project development process:

- Planning and permitting
- Site preparation for the plant (capacity ~ 50 000 m³/day)
- Decommissioning, final rehabilitation

SUPPORTING INFRASTRUCTURE, EQUIPMENT & SERVICES

Machineries & equipment to be used:

- excavators, haul trucks, hammer crushers, screens, conveyers etc.
- Temporary camp, if required.
- Access road if required – agreement with landowner shall be in place.
- Energy – a diesel-powered generator and solar energy
- Water supply – to be transported to site, but a permit shall be in place if boreholes are required.

NEED AND DESIRABILITY OF THE PROJECT

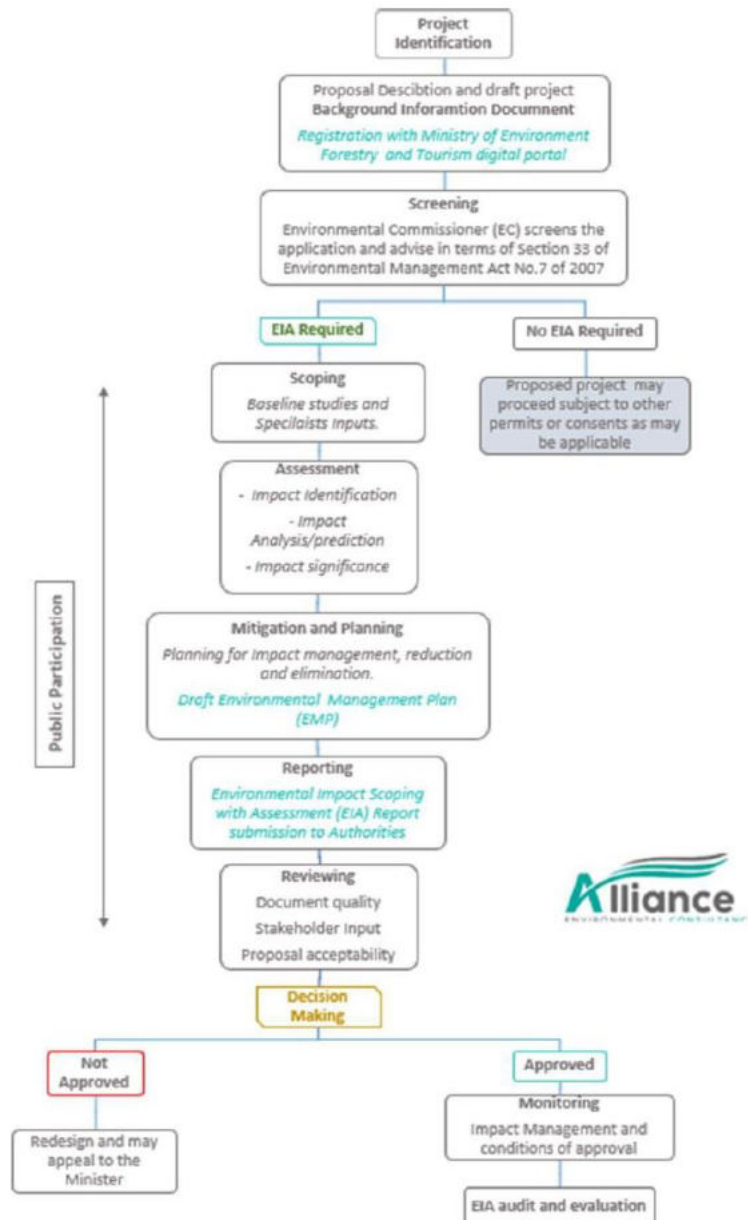
Mining activities are of great contribution to the country's revenue and one of the largest economic sectors in the country.

The proposed small- scale mining activities will directly contribute to the economy of the local community, possible benefits at a regional to national scale such as:

- Contributions to annual license fees to the government through the Ministry of Mines and Energy (MME).
- Payments of lease agreements and services rendered.
- Provisional contracting opportunity for companies interested in small-scale mining activities (up-to ~15 – 17 years).
- Provision of contractual employment opportunities.
- Increase in knowledge on the subsurface which then contributes to development, and geoscience research.

ENVIRONMENTAL IMPACT ASSESSMENT

Conducted in terms of the Environmental Management Act 7 of 2007 and EIA regulations. Aim to identify, assess and ascertain potential environmental impacts that may arise from the proposed activity.



Environmental Impact Assessment

Issues identified to be investigated include, but are not limited to:

Positive impacts

- Employment creation – 25 skilled and unskilled (priority for locals)
- Income generation (local/national)
- Training opportunities – skills development

Negative impacts

- Possible fauna & flora disturbance
- Possibility of **illegal hunting**
- Land use **conflict**
- Minor visual, soil, water, air and noise pollution especially during operation phase
- Health and safety impacts, if appropriate Personnel Protective Equipment (PPE) are not provided or used correctly
- Solid and hazardous waste management
- Possible disturbance to heritage/historically important area of interest

PUBLIC PARTICIPATION PROCESS

PUBLIC NOTICE

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED EXPLORATION & MINING ACTIVITIES WITHIN MINING CLAIMS 72088, 72089, 72090, 72091 & 72109, OMUSATI & KUNENE REGIONS

On behalf of the proponent, Alliance Environmental Consultancy CC (AEC) herewith gives notice in terms of the Environmental Management Act No. 7 of 2007 and Environmental Impact Assessment (EIA) Regulations for the proposed prospecting and mining activities within MCs 72088, 72089, 72090, 72091 & 72109.

An Environmental Scoping and Impact Assessment (ESIA) and Draft Environmental Management Plan (EMP) will be submitted to the Ministry of Mines and Energy (MME) and the Ministry of Environment Forestry and Tourism (MEFT) to support the application for an Environmental Clearance Certificate for the proposed activities.

Proponent: Mr. Martin Demutawo Shaanika

Commodities: Industrial minerals

Location of the project area: Near Omakange within Okongoro and Ukwaludhi communal conservancies (Fig1).

PROJECT ID	PROJECT NAME	DATE	SCALE	PROJ. NO.
72088, 72089, 72090, 72091, 72109	Exploration and Mining Activities	2022	1:50,000	72088-72109

LEGEND

- Settlements
- Main Road
- District Road
- Nampower Line
- Conservancies
- Mining Claims Regional Boundaries
- 72088
- 72089
- 72090
- 72091
- 72109
- Omusati
- Kunene

Metadata Table:

PROJECT ID	PROJECT NAME	DATE	SCALE	PROJ. NO.
72088, 72089, 72090, 72091, 72109	Exploration and Mining Activities	2022	1:50,000	72088-72109

Locality Map

All Interested and Affected Parties (I&APs) are hereby invited to register and submit comments duly motivated in writing on or before the 21st of November 2022. Registration and Background Information Documents (BID) for the project can be requested from the email address below. The public meeting will be held at Tjumuiva Combined School on the 19th of November 2022 at 09am and another at 13H00.

Email: info@arvivo-aec.com

Cell: 0857728929

- Public participation is the cornerstone of the EIA process
- I&APs will be given the opportunity to comment on the findings of the reports, during the specified comment periods
- I&APs are hereby invited to comment on environmental, social, and economic issues relating to the proposed project.
- It involves:
 - Public notifications ., e.g. newspaper etc.
 - I&APs registrations
 - Consultations with relevant stakeholders

Questions & Comments

**THE LAST DAY TO SEND COMMENTS IS ON 22 NOVEMBER
2022**

info@enviro-aec.com

Cell: 0857728929

COMMENTS AND RESPONSES

QUESTION BY	QUESTION	RESPONSE BY AEC CONSULTANT
<p>Traditional Authority Representative</p>	<p>What is the size of each MCs?</p>	<p>72090 - 17.22ha, 72109 - 13.82ha, 72091 - 17.30, 72088 - 17.19ha and 72089 - 17.42ha</p> <p>Generally, a MC is usually approx.18ha.</p>
	<p>What influence does the PPP have on the ECC approval?</p>	<p>The PPP purpose is to afford the public an opportunity to provide their comments or concerns with regards to the proposed project. The idea of PPP is to have an open and transparent communication between the consultant/proponent and the public that are potentially interested or affected. Usually, the input from the public makes a great effort during the drafting of the assessment reports at mostly involve the native information of the project locality. However, the final decision lies in the hands of the Ministry of Environment Forestry and Tourism as well as the potential competent authorities.</p> <p>AEC further clarified that; the main aim of the team is to engage/consult with the public in order to obtain appropriate information pertaining the proposed project such information will be submitted to the Government for decision making.</p>
	<p>Will the proponent rehabilitate the site once the site and/or work have been completed?</p>	<p>The Environmental Management Plan as well as the scoping assessment provides rehabilitation measures, it is important that the site is rehabilitated upon project closure for the land to be usable again. Although might not be 100% as the original state.</p>

	<p>Is there a limited number of MCs that can be issued to individuals?</p>	<p>According to the law that is employed by the Ministry of Mines and Energy, an individual can only have a maximum of ten (10) mining claims to their name.</p>
	<p>Did you consider reviving dormant crushers that are within the area?</p>	<p>According to the proponent that has not been considered, maybe at a later stage once the ownership is determined and if the need arise. However, that would be an alternative to minimize ground damage at a larger area instead of working from the already disturbed sites in the vicinity.</p>
	<p>Please also include the social corporate responsibility that can benefit the community in the long run e.g., build TA office, upgrade clinic, establish community garden etc.</p>	<p>That will be a measure to be considered by the proponent through mutual agreements with the relevant parties when the project progresses.</p>
	<p>There have been many developers within the area, but all they do is empty promise, they never fulfil their promise – and its worrisome.</p>	<p>AEC nor the proponent are not familiar with other developers that are/were present in the area, therefore cannot comment on that. However, to avoid similar situations the proponent will keep lines of communication with the public open throughout the life of the project.</p>
	<p>Also include educational training and skills development and/or transfer for the local community – Traditional authority needs assistance from you developers.</p>	<p>Usually, projects as this one gives priority to the locals in terms of employment and sills sharing. This are also provided in the EMP and the scoping report. Response by Proponent: He further explained that him as the owner of the MCs will make sure that local community are given priority in terms of job employment, procurement of material and service delivery.</p>
	<p>How long it will take for Government to approve so that the project can start – the people are hungry and need employment.</p>	<p>once the EIA report is submitted, the Government will take at least three (3) months to review and make decision.</p>

	If the project commences, what is the life span?	At the moment, the predicted period is approximately 15 – 17 years, depending on the available resource and geological confirmation.
	There is poverty in the area, people really need job – that's a project like this will improve their living standards, development is needed.	Noted and as allured by the proponent, the local community will be given priority.
	At least three (3) TA members should be selected to be part of the ongoing process for the proposed project.	Noted and will be considered.
	Once operation start, please provide/avail the local community the excess/waste/unwanted materials at a cheaper price.	Noted and will be considered.
	Have you also considered consultation with the local councilors?	Yes, the public invitation was provided to them, however, they refereed AEC to consult with the Ruacana Councilor office and that will be employed.
	How will you ensure that local people are considered in terms of the employment?	An employment plan shall be developed, which will have details regarding the employment procedures including hiring local community.
	We are hungry, we want work and feed our family, please don't give us empty promise.	Noted and as allured by the proponent, the local community will be given priority.
Local Community Member	I was working for many years for a certain company, but they never provided us with the employment contracts and not even social security registration.	All people that will be working on the project shall sign the employment contract and they should be registered with social security.

	<p>The TA is failing us, they do not employ people as promised, they should revise the TA committee strategy.</p>	<p>Noted, the proponent will formulate an employment plan that will give equal opportunities to all potential members of the public that qualifies.</p>
	<p>To the TA, why didn't you invite all people to the meeting to attend?</p>	<p>All I&APs were invited through newspaper adverts, site notices were placed at the Tjimuhiva School, Tsandi community hall and at the Omakange community hall, the message was given to the TA to invite all potential affected parties too. However, in the future radio announcement will be considered in the future since some community or areas do not receive newspapers. 0815870345</p>
	<p>we have noticed that in Namibia, only young people are being employed, will you consider employing also older people?</p>	<p>There will be an employment plan which will guide the employment procedures to give equal opportunities to all deserving people.</p>
	<p>How many % of unskilled and skilled employees will be hired? And also consider employing all tribes, not just from one tribe.</p>	<p>It is not easy to decide now, it will be clearer once the project have well established, but definitely the local community will be given priority, especially when it comes to unskilled employment, procurement of good and service delivery.</p> <p>There should be I&APs communication strategy plan, this will enable effective and efficient communication with the local community. For example, the proponent should always report to the traditional authority's office before accessing the site.</p>
	<p>Many thanks for coming and engage with us, there have been so many project/developers in the area, but I am disappointed that our own local community steal materials such as solar panels and batteries.</p>	<p>Disappointed to hear that the local community engage in acts like that, this will chase potential investors away. We hope to have a better relationship with the community once our operations begin says the proponent.</p>