

**SCOPING REPORT (BID)**

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE ESTABLISHMENT AND OPERATION OF A PROPOSED FUEL SERVICE STATION PROJECT AT ONYATI, ONYAANYA IN OSHIKOTO REGION**

**Prepared for (Proponent):**

**TATEKULU FILLEMON SHUUMBWA NANGOLO**

**KING OF ONDONGA**

**P. O. BOX 70, ONDANGWA, CELL: 0811246236**



**SUBMITTED TO:**

**MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM**

**MINISTRY OF MINES AND ENERGY**

**MINISTRY OF AGRICULTURE, WATER AND LAND REFORM**

**PROPONENT: TK. FILLEMON SHUUMBWA NANGOLO**

## PROJECT INFORMATION

*PROJECT TITLE:*            *Construction of Fuel Service Station at Onyati Village, Onyaanya Constituency of Oshikoto Region*

*PROPONENT:*            Tatekulu Fillemon Shuumbwa Nangolo  
P. O. Box 70 Ondangwa  
0811246236

*CONSULTANT:*            Kondjashili M. Moses  
Business Success Consulting  
P. O. Box 3382  
Ongwediva  
0811622154  
[kondjashilimoses@gmail.com](mailto:kondjashilimoses@gmail.com) / [bscongwediva@gmail.com](mailto:bscongwediva@gmail.com)

*LOCATION:*

<b>Waypoint</b>	<b>Latitude S</b>	<b>Longitude E</b>
<b>1</b>	-18.217820°	16.412451°
<b>2</b>	-18.217672°	16.412589°
<b>3</b>	-18.217496°	16.412401°
<b>4</b>	-18.217643°	16.412254°

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## ACRONYMS:

OTA	Ondonga Traditional Authority
MAWLR DAPEES	Ministry of Agriculture, Water and Land Reform Directorate of Agricultural Production, Extension and Engineering Services
MAWF	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment Forestry and Tourism
MME	Ministry of Mine and Energy
NamWater	Namibia Water Corporation
NBRI	National Botanical Research Institute
NORED	Northern Regional Electricity Distributors
OEC	Office of the Environmental Commissioner
PPE	Personal Protective Equipment
BSC	Business Success Consulting
DEA	Directorate of Environmental Affairs
DSR	Draft Scoping Report
DWA	Directorate of Water Affair
EA	Environmental Assessment
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
F	Forestry Protected
GPS	Global Position Systems
Ha	Hectares
I & APs	Interested and Affected Parties

### **2. 1.0 INTRODUCTION**

#### **1.1 Project Background**

This Environmental Impact Assessment (EIA) report is prepared to provide information on the proposed construction and operation of a fuel service station along the B1 main road at Onyati Village in Onyaanya Constituency of Oshikoto Region. The Proponent for this project is Tatekulu Fillemon Shuumbwa Nangolo.

The proposed construction of Onyati Fuel Services Station is envisaged to meet the demand for fuel by transportation vehicles, industrial and household consumers at Onyati road intersection. Both the B1 Highway road as well as the Okankolo – Onyati road users will be serviced by the proposed service station as there is currently no facility in the area to cater for such transportation services and goods (fuel and fast food convenience shop).

The nearest fuel service stations are only found further out in neighbouring townships of Omuthiya and Onyaanya. Hence, the project Proponent realized that a commercial opportunity exists to establish a fuel service station at this remote area of Onyati. Once established, the proposed Onyati Service Station will be the second fuel service station in Onyaanya Constituency.

The land earmarked for the development of Onyati fuel service station measures 633 square meters in extent. The proponent intends to establish two fuel storage tanks with a combined storage volume capacity of 37,000 liters or 37 cubic meters. The first tank is for Petrol, with a storage capacity of 23,000 liters, whereas the second tank is for diesel storage, with a 14,000 liters capacity. This capacity is considered adequate to relief the demand for the current rate of traffic in the area.

In addition to the two fuel storage tanks, the proposed development will also put up a fast food convenience shop to cater for the consumer needs of travelers and Onyati Community. The size of the convenience store will measure 60 square meter in extent.



## 1.2 Rationale for establishing the Project

Firstly, the Namibia's National Energy Policy in terms of the downstream liquid fuel sector promote the improvement in security of supply of fuel through increased product storage, related infrastructure development, and the diversification of the market, as well as the enhancement of access to products, especially in the remote areas of the country.

Accordingly, the proponent would like to establish the fuel service station in order to improve access to fuel products to the consumers in the remote areas. And in meeting this demand for the consumer, contribute to the socioeconomic development of Onyati Area and earns the investment reward of establishing a successful and sustainable business.

## 1.3 Purpose of the EIA

It is important to note that this scoping report is for activities of preconstruction, construction and consequent operations of a petrol and diesel fuel service station. The fuel station is listed as one of the activities that cannot be undertaken without an Environmental Clearance Certificate (ECC). This EIA process is in line with the regulations stipulated in the Environmental Management Act (EMA) No.7 of 2007 and its Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012). All in all, the subjecting of the project to the EMA No. 7 of 2007 forms the basis of this EIA.

It is also crucial to note that the EIA process will ensure that the proposed construction project is carried out in a manner which makes it technically sound, economically feasible, socially acceptable and environmentally sustainable. The EIA serves an important purpose:

- i. The EIA study serves to determine, analyses and presents the environmental impacts (**Positive** and **Negative**) of the proposed development project and associated infrastructure. An Environmental Management Plan (EMP) to mitigate the negative impacts and plan in such a way that enables a rational decision to be made regarding the implementation and management of the proposed project.
- ii. The EIA further contributes to mitigate the adverse impacts by generating a number of project alternatives for the proposed developments. In general, the purpose of the

EIA is to anticipate and prevent, minimise and manage, potential significant negative impacts on development that may: Cost too much money to rectify in future, Pose risk to lives, livelihood or health or current and future generations, Help to seek opportunities to optimise potential benefits of development.

- iii. The EIA process is expected to provide a mechanism whereby the overall environmental performance of the planned activity is enhanced through:
  - a) Identification of sensitive environmental components likely to be affected by the construction activity.
  - b) Identification and evaluation of the potential impacts associated with the pre-construction, construction and operation,
  - c) Preparation of construction plans and recommendations regarding measures that minimize adverse impacts and enhance beneficial impacts.

## **1.4 Description of Activities**

Activities involved in the process of project implementation include preconstruction, construction and operation.

### **1.4.1 Preconstruction**

This project phase involves the planning, designing and documenting the project. The preconstruction phase cover activities such as the feasibility and environmental studies that are aimed at attaining sustainable development goals. In terms of the Environmental Impact Assessment, the EMP as part of the planning phase the necessary mitigation and corrective action to be taken to minimize potential impacts.

### **1.4.2 Construction of a fuel service station and convenience store**

This phase involves the actual development of the project infrastructure. The impacts during this phase such as pollution, noise and dust usually occur immediately. Hence,

the site should be monitored constantly during the construction phase, in order to prevent and minimize the negative impacts as directed in the Environmental Management Plan and by applying sound environmental management. *The activities during the construction phase include:*

- Excavation of trenches and pits for services and infrastructure
- Installation through engineering supervision services the underground storage tanks, oil separator, spill control infrastructure, submersibles, generator and dispensing pumps
- Electrical reticulation above and below the ground
- Construction of buildings, paving, pump islands, storm water drainage, site access streets and related infrastructure.
- The transportation of equipment, components, machines and building material to site
- Site clean-up and housekeeping.

### **1.4.3 Operation of the fuel service station**

The operational phase involves the operational activities of the project, in order to achieve the intended purpose. The activities include:

- Filling underground storage tanks with fuel from fuel tankers,
- Fuel dispensing into vehicles and approved containers
- Tyre pumping operations
- Operations of the kitchen and onsite shops
- Site clean-up and housekeeping
- Traffic generated by vehicles

### **1. LEGAL REGULATORY FRAMEWORK**

The current Environmental Management Act (No. 7 of 2007) is based on the need to take an integrated approach to environmental management and the need to work towards the goal of sustainable development. Furthermore, there are other laws that need to be complied with accordingly;

#### **2.1 Constitution of the Republic of Namibia (1990)**

The Namibian Constitution commits the Government of Namibia to sustainable utilisation of Namibia's natural resources for the benefit of all Namibians. Article 95 of the constitution states that "the State shall 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 utilisation of natural resources on a sustainable basis for the benefit of all Namibians both present and future."

#### **2.2 Environmental Management Act, 2007 (Act No. 7 of 2007)**

The issuing of an Environmental Clearance Certificate is based on the review of the Environmental Assessments (EA) reports prepared in accordance with the Environmental Management Act (2007) and the Environmental Impact Assessment Regulations, 2012.

#### **2.3 National Energy Policy of Namibia**

The Ministry of Mines and Energy is responsible for the development and implementation of wider energy legislation and institutional mechanism including the overall control of energy.

The National Energy Policy's main goals are to ensure the security of all relevant energy supplies to the country; to create cost-effective, affordable, reliable and equitable access to energy for all Namibians; to promote the efficient use of all forms of energy; and to incentivise the discovery, development and productive use of the country's diverse energy resources.

The National Energy Policy also presents the main policy issues for each of Namibia's main energy sectors, namely, the electricity sector, the upstream oil and gas sector, the downstream liquid fuels sector, the downstream gas sector, and the thermal energy sector.

In this case the Onyati Project activities are associated with the liquid fuel sector. For the downstream liquid fuels sector, the key policy thrusts are to improve security of supply through increased product storage, related infrastructure development and the diversification of the market, and to enhance access to products, especially in the remote areas of the country.

#### **2.4 Petroleum Regulations (1991 and 2000)**

The regulations serve to regulate the purchase, sale, supply, acquisition, usage, possession, disposal, storage, transportation, recovery and refinement of used mineral oil are published under the Petroleum Products and Energy Act 13 of 1990. Maintaining standards and avoidance of environmental harm caused by the keeping, handling, conveying, using and disposing of petroleum products must be done in line with this regulations.

#### **2.5 Petroleum Products and Energy Act 13 of 1990 and subsequent amendments**

It gives control over the storage of refined petroleum products, and to provide for matters incidental thereto. The handling and discharge of oil products must be conducted in line with this act.

#### **2.6 The Public Health Act 36 of 1919 and subsequent amendments**

This Act prohibits the existence of a nuisance such as noise and odors. The proponent should be familiar with the provisions of this act, to control impacts and nuisances.

#### **2.7 Hazardous Substances Ordinance (14 of 1974) as amended by the Atomic Energy Radiation Protection Act (2005)**

The ordinance controls substances with potential to cause injury or illhealth or death of human beings because of their toxic, corrosive, irritant, strongly sensitizing or flammable nature. There are many products that are covered under this Act including petroleum fuels and

lubricants. In terms of operations, the Hazardous Substances Ordinance, 1974 directs that the manufacturing, storage, handling and processing of a hazardous substance should be done in line with the ordinance. It also regulate the construction of service stations and facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid, petroleum, gas or paraffin.

The proponent should implement necessary measure and take precaution throughout the product lifecycle: from receiving, storage, product use and disposal. In cases were special storage facilities are required the Proponent should provide as such.

## **2.8 Atmospheric Pollution Prevention Ordinance (Ordinance 11 of 1976)**

This ordinance provides for the prevention of air pollution. Measures are required to ensure that dust emanating from construction activities is kept at an acceptable levels and operations.

## **2.9 Water Act, 1956 (Act No. 54 of 1956)**

The Water Act, Act No. 54 of 1956 is in force. The Act makes provision for a number of functions pertaining to control and use of water resources, water supply and protection of water resources.

The Directorate of Resource Management within the Department of Water Affairs (DWA) at the MAWLR is currently the lead agency responsible for management of surface and groundwater utilisation through the issuing of abstraction permits and waste water disposal permits. DWA is also the Government agency responsible for water quality monitoring and reporting.

## **2.10 Labour Act (Act No. 11 of 2007)**

The purpose of the Act is to “consolidate and amend the labour law; to establish a comprehensive labour law for all employers and 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; to protect employees from unfair labour practices; to regulate the registration of trade unions and employers’ organisations; to regulate collective

labour relations; to provide for the systematic prevention and resolution of labour disputes; to establish the Labour Advisory Council, the Labour Court, the Wages Commission and the labour inspectorate; to provide for the appointment of the Labour Commissioner and the Deputy Labour Commissioner; and to provide for incidental matters.

## **2.11 National Waste Management Policy (2010)**

The essence of the National Waste Management Policy, 2010 is to prevent and reduce health risks associated with exposure to healthcare substances, household, radiation and other waste from healthcare workers, waste handlers and public by promoting sound environmental waste management practices. In addition, to design appropriate means of safe and sustainable waste management. In order to achieve lasting positive impact on health and environment, any new program should be subjected to sustainability assessment before implementation.

## **2.12 BEST PRACTICES IN ESTABLISHING SERVICE STATIONS IN NAMIBIA**

In addition to the legislative framework, the proponent is also made aware of the industry standards and best practices of establishing and managing service station in Namibia.

### **2.12.1 Applicable Industry Standard Requirements:**

Namibia is yet to develop its own industry standards, but the following industry and engineering designs control standards from the South Africa’s Beareua of Standards are currently used by the Ministry of Mines and Energy and service stations to mitigate risks associated with liquid oil. These standards are adopted from an industry study, J. Antonius (2020);

TABLE 1: INDUSTRY STANDARDS

Industry Standard	Description
SANS 100131 (1977)	The storage and Handling of Liquid Fuel. Part 1: Small Consumer Installations.
SANS 100131 (1979)	The storage and Handling of Liquid Fuel. Part 11: Larger Consumer Installations

SANS 10400 (1990)	The application of the National Building Regulations
SANS 10089-1 (1999)	The petroleum industry Part 1: Storage and distribution of petroleum products in above-ground bulk installations
SABS 0131 (1999)	The petroleum industry Part 3: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations
SANS 10089-2 (2002)	The petroleum industry Part 2: Electrical installations in the distribution and marketing sector
SANS 1186-1 (2003)	Symbolic safety signs Part 1: Standard Signs and General Requirements
SANS 10142-1 (2003)	The wiring of the premises Part 1: Low-voltage installations
SANS 1535 (2003)	Glass-reinforced polyester-coated steel tanks for the underground storage of hydrocarbons and oxygenated solvents and intended for burial horizontally.
SANS 10131 2004	Above-ground storage tanks for petroleum products
SANS 10089-3 (2010)	The petroleum industry Part 3: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations.
SANS 1020 (2013):	Power-operated dispensing devices for flammable liquid



### 3. PROJECT DESCRIPTION

#### 3.1 Overview

The proponent intends to construct and operate a fuel service station at Onyati village in Onyaanya Constituency of Oshikoto Region. The earmarked land for the development which is located in a communal land has already been allocated by both the village headman and Ondonga Traditional Authority.

#### 3.2 Location

The proposed Onyati Fuel Service Station will be situated along the B1 highway road, about 30 km from Omuthiya Town and 50 Km from Ondangwa Town. A portion measuring 633 square meters (633m<sup>2</sup>) is allocated to the proponent exceptionally for the proposed development.

TABLE 2: GPS COORDINATES FOR THE PROPOSED SERVICE STATION

Waypoint No.	Latitude S	Longitude E
1	-18.217820°	16.412451°
2	-18.217672°	16.412589°
3	-18.217496°	16.412401°
4	-18.217643°	16.412254°



FIGURE 1; SITE LAYOUT



FIGURE 2: SITE POSITION

### **4. DESCRIPTION OF THE RECEIVING ENVIRONMENT**

#### **4.1 General Overview**

This section presents the description of the natural environment that may be affected by activities proposed in the study area. The EIA aims to identify the environmental impact that the proposed construction and operation of Onyati Service Station might have on the environment, and this section put into perspective of how the environment is before the development.

#### **4.2 Physical Environment**

##### **4.2.1 Climatic**

The Oshikoto Region has rainfall annual average that range from 350 mm in the south-west to 550 mm in the north-east. Usually most of the rain falls between November and April with a peak in February. Temperatures usually reach 45° C in summer, but relatively easy to bear due to high humidity (Mendelsohn, 2003).

During April to October, the Oshikoto region does not receive any rain and average minimum temperatures range between 4° and 50° C. In general the summers are hot and winters are mild but the nights are cold.

##### **4.2.2 Water Source / Supply**

The water is being supplied by NamWater through major pipelines between Ondangwa and Omuthiya Town, (Mandelhson et al 2000). The new Fuel Service Station will also be connected to a supply point branching from the main pipeline, which is less than 20m from the proposed site.

### **4.3 Power Supply**

The power available in the area is distributed by Nored. The existing power supply in the area is sufficient to cater for the proposed service station. The energy requirement for the project is not expected to have any significant impact on the overall electricity demands at Onyati.

### **4.4 Topology**

The ground topography at the project area is flat, and during the rainy season most of the rainwater is mainly absorbed into the soil. However, the adjacent B1 main road is slightly elevated and hence the rainwater from main road will drain towards the development. An appropriate drainage system has therefore to be installed.

### **4.5 Geology**

There are no geological rocks of any kind encountered anywhere on-site, and around the project area. The proposed project will be situated in the Ovambo basin. Namibia has a unique and ancient geological history with great rock formation and the Ovambo basin is no exception (Kangombe, 2010). The region lies on old continental base of graphite, gniesses, and volcanic rock. However most of this rock lies thousands of meters below the current land scape (Mendelsohn, Obeid, & Roberts, 2000).



FIGURE 3: MAP OF THE OVAMBO BASIN. (SOURCES, MANDELHSON, OBEID, AND ROBERTS 2000)

#### 4.6 Hydology

There are no permanent surface water observed in the locality of the project site such as such as ponds and canals.

#### 4.7 Socio –Economic Enviroment

The Namibian economy is not growing at the desired pace to create economic opportunities for the active population. Unemployment is a serious problem in Namibia particularly amongst the youth segment of the population, of which Oshikoto Region is no exception. There are limited economic opportunities in rural areas of Oshikoto Region, where most of the population reside. Energy plays a crucial role in economic growth and development. The proposed service station will create employment opportunities during its construction and operational phases. 25 people will be employed during construction and 10 durinnng operation.

#### 4.8 Biophysical Environment

A thorough evaluation of the natural ecosystem was undertaken and it was found that there is very little biodiversity on the proposed project site since the land is on the growth point where

there are also many existing businesses. The natural ecosystem of the project area has since been disturbed by the previous land use of farming activities.

#### 4.8.1 Flora observed

The piece of land earmarked for the construction of Onyati is already disturbed and cleared as it is within a mahangu field. During the screening assessment, a few shrubs of *Pechueloeschia leubnitziae* (locally known as *iizimba*), two acacia karroo and grass species of *Eragrostis trichophora* were observed. There are no protected trees in the proposed project area.



Acacia Karroo



*Pechuel-oeschea leubnitziae*

FIGURE 4: SOME OF THE FLORA OBSERVED



East View



West view

FIGURE 5: SITE LAND OVERVIEW

TABLE 3: FLORA OBSERVED AND EXPECTED TO OCCUR IN THE PROJECT AREA

Species	Present Inside Site	Expected
<b>Hyphaene petersiana</b>		√
<b>Acacia Karroo</b>	√	
<b>Eragrostis trichophora</b>	√	
<b>Colophospermum mopane</b>		√
<b>Terminalia pruinoides</b>		√
<b>Eragrostis trichophora</b>		√
<b>Aristida stipoides</b>		√
<b>Odysea paucinervis</b>		√
<b>Eragrostis trichophora</b>		√
Cleome gynadra		√
Cyperus compressus		√
<b>Cynodon dactylon</b>		√
Diospyros mespiliformis		√
<b>Crotalaria podocarpa</b>		√
Sesamum triphyllum		√
<b>Dichrostachys cinerea</b>		√



Hirpicium gorterioides		√
Kohautia virgata		√
<b>Terminalia sericea</b>		√
Solanum delagoense		√
Tephrosia burchellii		√
Berchemia discolor		√
Tribulus zeyheri		√
Pechuel-loeschea leubnitziae	√	
Sclerocarya birrea subsp. caffra		√

#### 4.8.2 Fauna observed

The site area does not provide suitable habitats for larger animals but only for small animals like mouse and reptiles. Part of the area is used by the villager for grazing their domestic animals like: cattle's, goats, donkeys and sheep's and whereas the other portion which is fenced was previously utilized for crop production (Mahangu).

According to Newman's birds by colour, commonality in Southern Africa (Keneth Newman, 2000), the following birds are to be found in the area. However this list is not exhaustive because birds have no boundaries;

TABLE 4: BIRDS IN THE PROJECT AREA

Item No.	Birds
1.	Laughing dove
2.	Grey backed finchlark
3.	Palm swift
4.	Yellow canary
5.	Streaky headed canary
6.	Monteiro Hornbill
7.	Red eyed bulbul
8.	Black chested prinia

<b>9.</b>	Namaqua sandrouse
<b>10.</b>	Social Weaver
<b>11.</b>	Pied Crow

### 5. ANALYSIS OF ALTERNATIVES

The piece of land for the proposed project was allocated to the proponent exclusively for the construction of a service station. There was no alternative site because the proposed site is the only piece of land allocated by the headman to the proponent. This piece of land was considered because it is easily accessible, with very little vegetation to clear and its strategic location at the intersection. The advantage of establishing a service station at the intersection is that it does not interfere with traffic congestion, and at the same time provide greater access to fuel for motorists stopping at the junction.

There is also currently a lack of vehicle filling stations in Onyaanya Constituency and therefore the construction of Onyati Service Station at this piece of land will help alleviate this problem. There will be atleast two service stations in the constituency, one at Onyaanya and the proposed at Onyati. *Besides location, alternative is also considered for bricks, and sewerage tanks:*

Two type of bricks are taken in to consideration:

- i. Clay bricks are superior building material for both people and the planet. They are supported by the fact that bricks contribute toward green building credits at an international level. They are also mostly used as decorative and therefore save on plaster and paint (Reduces maintenance) during the initial construction of building, they are also environmentally friendly because they regulate temperature.
- ii. Concrete bricks and reinforcement concrete are far from being biodegradable and environmental friendly. However, the concrete bricks have much more compressive strength, and are water resistant and therefore do not absorb water. This makes them almost waterproof and it is beneficial for construction activities.

There are two type of onsite sewage treatment septic tank or aerobic tank:

- i. Septic tank, implies anaerobic conditions (bacterial action in the absence of air). There are two components of a septic tank system: the septic tank itself, which removes the solid matter, and the subsoil disposal system (trench bed, leach field), which receives the effluent from the septic tank (Steven, Walter, & Moberg, 1973).

- ii. Aerobic tank are similar to septic tank however they have three compartments compared to two or one in the septic tank. Aerobic tank can achieve an effluent of lower BOD (biological oxygen demand) than septic tanks, typically in the 20 to 100 mg/l range, but certainly not fully stabilized. Further treatment can be achieved by chlorine and subsurface discharge in soils. Aerobic tanks are expensive to run compared to septic tanks and require regular maintains but are Environmentally friendly compared to septic tanks (Steven et al., 1973).

### 6. PUBLIC CONSULTATION

Public consultation is an important component to the Environmental Impact Assessment process. The Environmental Management Act (EMA No 7 of 2007) and the Environmental Impact Assessment Regulations of 2012 directs that a public consultation process should be undertaken.

Moreover, public consultation present a unique opportunity to the community to be involved in the decision making and implementation of development undertakings. The process of involving the public also serves to provide sufficient and accessible information to the public in an objective manner.

#### 6.1 Purpose of Public Participation

In order to embrace the best practices of conducting Environmental Impact Assessments, the Namibian Environmental Assessment Policy of 1994 made a mandatory requirement for the EAP to carry out public consultations. This is in line with national legislations that promotes participatoy democracy in the development process. *The purpose of the public participation process further serves to:*

- Provide information on the proposed projects to Interested and Affected Parties.
- The provision of pertinent project information establishes the public's interests, concerns and expectations.
- To obtain important inputs and comments from the public and key stakeholders

#### 6.2 Key Stakeholders to the Public Consultation Process

The stakeholders consulted during the public consultation comprises of:

- Ministry of Mines and Energy in Namibia
- Ministry of Environment, Forestry and Tourism
- Onyati Community Members

- Ondonga Traditional Authority
- Onyaanya Constituency Office
- Oshikoto Regional Council
- Oshikoto Regional Governnor’s Office

## **6.3 Public Consultation Process**

### **6.3.1 Consultation with Key Stakeholders**

During the scoping process, the Background Information Document was provided to the key stakeholders together with comment sheets. The purpose of the BID document was to provide the project information and to invite commends from the key stakeholders listed above in Section 6.2. No input was received from the key stakeholders.

### **6.3.2 Consultation with I&As**

### **6.3.3 and Public**

#### **a) Newspapers publications**

The scoping process was publicized through adverts in the New Era on **8<sup>th</sup> and 15<sup>th</sup> June 2022** and the Confidante Newspaper on the **08<sup>th</sup> and 11<sup>th</sup> July 2022**. The newspaper publications invited stakeholders and members of the public to register as IAPs in order to submit their commends. The copy of the adverts are attached hereon, *annexture 1*.

#### **b) Site notices**

The site notices were placed at various bottle stores at Onyati Intersection location as well as at Onyaanya Constituency Office on the **8<sup>th</sup> June 2022**.

#### **c) Public Consultation Meeting**

There was no public consultation meeting held due to the prevailing conditions of Covid-19. Considering the fact that the country was facing the 3<sup>rd</sup> wave of Covid-19 infection, the the public health regulations prohibited public gatherings.

## Section 7

### 7. ENVIRONMENTAL IMPACTS

The main purpose of this section is to identify and assess the most significant environmental impacts by describing the measurable aspects of these impacts. The mitigation measures of these possible impacts will be provided in order to minimize the extent of the impacts resulting from various activities during the construction and operational phases.

Therefore, the impact assessment process entails the preliminary identification and consideration of both positive and negative impacts on the biophysical and socio-economic environments.. The identified potential impacts that are considered to be significant during the scoping process were studied further in this EIA study.

#### 7.1 Method of Assessment

The assessment is carried out in tabular form to facilitate the evaluation, followed by mitigation measures. In order to determine significance, each potential impact was subjected to a range of assessment criteria listed below.

TABLE 5: CRITERIA USED TO DETERMINE THE SIGNIFICANCE OF IMPACTS AND THEIR DEFINITIONS

CRITERIA	DESCRIPTION
Nature	This criteria indicates whether the proposed activity has a <b>Positive</b> or <b>Negative</b> impact on the environment
Extent	This criteria measures whether the impact will be: <b>Site specific:</b> Confined to the immediate vicinity of the project <b>Local:</b> limited to within 15 km of the project area <b>Regional:</b> limited to about 100 km radius <b>National:</b> limited to within the borders of Namibia <b>International:</b> Beyond the borders of Namibia



Duration	<p>This criteria looks at the time frame for which the impact will be experienced:</p> <p><b>Short term:</b> days, less than a month</p> <p><b>Medium term:</b> months, less than a year</p> <p><b>Long term:</b> years, less than 10 years</p> <p><b>Permanent:</b> more than 10 years</p>
Frequency	<p>This criteria refers to the return period for impacts which will recur over and over again</p> <p>Less than a year</p> <p>1 to 10 years</p> <p>10 to 100 years.</p>
Reversibility	<p>This criteria refers to the permanence of the impact</p> <p>Reversible: natural</p> <p><b>Reversible:</b> artificially</p> <p><b>Irreversible:</b> permanent damage</p>
Likelihood of Occurrence	<p>This criteria refers to the possibility of a particular impact occurring as forecast.</p> <p><b>Highly likely:</b> Is expected to occur in most circumstances</p> <p><b>Likely:</b> Will probably occur during the life of the project</p> <p><b>Possible:</b> Might occur during the life of the project</p> <p><b>Unlikely:</b> Could occur but considered unlikely or doubtful</p> <p><b>Rare:</b> May occur in exceptional circumstances</p>

## 7.2 Impacts

The main purpose of this section is to identify and assess the most significant environmental impacts by describing the measurable aspects of these impacts. The mitigation measures of these possible impacts will be provided in order to minimise the extent of the impacts resulting from various activities during the construction and operation phases.

These identified potential impacts have been assessed. Mitigation measures are proposed for each identified impacts in the EMP Section.

### **7.2.1 Socio-economic impacts**

The proposed construction of the Service Station is expected to boost the economic activities of Onyati Village. Moreover, the proposed development will promote the improvement in security of supply of fuel through increased product storage and related infrastructure development. Other socio-economic impacts include:

- Employment creation in Onyati Village
- Enhanced Local Economic Development
- Infrastructure development
- To improve accessibility of fuel products to the area residents and motorists in the areas

### **7.2.2 Air quality impacts**

The proposed establishment of Onyati service station will comprises of a number of construction activities which involves the use of heavy industrial machinery and earthmoving equipment. The use of heavy industrial machinery will emit dust that will impact the air quality. Dust might also arise during the excavation of trenches were the foundation will be laid, the clearing of vegetation and levelling of land will also result in dust.

Considering the sand soil texture at Onyati, it is important that dust suppression techniques are employed to reduce dust emission during construction. The sand loads in teeper trucks should be during transportation, spray vehicle tracks and avoid dust emitting activities on windy days.

The air quality can also be impacted during operation. The hydrocarbon vapours contains volatile organic compounds, which harm human health and contribute to ozone pollution. The motor vehicles produce carbon monoxide, and therefore should not be left with running engines while idling.

### **7.2.3 Noise Pollution**

Excessive noise is generated from heavy trucks during the construction process of a service station. Construction vehicles and equipment such as Loader Backhoes, Concrete mixer, other machineries used in the construction phase can be a nuisance and disturbance to the community members. Noise impacts from the construction phase can be mitigated by restricting heavy duty work to normal working hours, and ensuring that vehicles and machines are consistency serviced to minimize noise.

### **7.2.4 Sewage**

Sewage will be generated by the ablution facilities at the proposed service station. It is therefore very important to construct appropriate septic tanks for the management of this type of waste. Failure to manage waste properly will result in pollution and this might have a detrimental impact on the people's well-being and the quality of the environment, especially those that live in the vicinity of the development.

### **7.2.5 Health and safety**

Firstly, the potential impacts on human health and safety resulting from project activities could include occupational accidents and injuries, vehicle accidents, exposure to weather extremes, adverse health effects from dust generation and emissions, and contact with hazardous materials.

Secondly, hydrocarbons are hazardous and hence the inhalation of fumes should be prevented. Fuel, oil spills and water at the service station can put workers and customers at the risk falling.

Thirdly, the use of compressed air to fill tires can also be dangerous. Although it is not common, tyre explosion can be extremely dangerous to the employees. High pressure from the air compressor can also shoot small objects from the floor that can pierce people. The employees should be well oriented with the Health and Safety plan. The service should also be kept tidy.

Fourthly, theft and robbery put the lives of employees of service stations at risk. Measures should be put in place for their safety.

### **7.2.6 Fire Risk and Control**

Fire explosion should be prevented at all costs during the operation of service station. Fuel is extremely flammable. All fuel should be handled according to Material Safety Data Sheet instructions and SANS requirements to prevent fire explosion.

### **7.2.7 Biodiversity loss**

The proposed project will involve site clearing that will lead to biodiversity loss. The identified site has very little vegetation and there are no protected trees. However, the few shrubs of *Pechuel-loeschea leubnitziae*, two acacia karroo and grass species of *Eragrostis trichophora* will be cleared. The little fauna such as reptiles, and the birds will also be driven away from their habitat by the construction noise.

### **7.2.8 Solid and hazardous waste management**

The potential impacts of improper housekeeping practices during construction and operation such as illegal disposal of waste to land could contaminate and pollute the soil which in turn could pollute the Environment and the visual appearance. Solid waste such as cans, lumber, steel scrap, plastics, cement bags, bricks, general rubbish, domestic waste will be generated during the construction and operation phases.

Therefore, a skip containers of adequate design and capacity should be provided for solid waste, such as discarded cans and bottles. Proper facilities for storage and disposal of used and waste oil and gas must also be provided.

### **7.2.9 Traffic Congestion**

The proposed Onyati fuel service station will have slight effect on the traffic flow along the B1 Main Road as vehicles are expected to slow down when approaching the service station. However the impact will be minimal because of the strategic location of service station near the T –junction, as vehicles are mandated to slow down at the junctions anyway. The traffic flow will also be enhanced by providing sufficient parking space at the station, and by constructing acceleration and deceleration lanes at the B1 main road.

#### **7.2.10 Soil and underground Water Pollution**

The inappropriate storage and handling of hydrocarbon products present a risk groundwater and soil pollution. To mitigate the potential impact of groundwater and soil pollution, the ground level surfaces of the project site must be covered with an impermeable material. In cases where the water table is high, a single steel walled tanks or double-walled steel tank, should be installed. Moreover, suitable sand shall also be used for both bedding and backfilling of steel tanks.

#### **7.2.11 Visual Impacts**

The general visual of the project area has been altered by the amount of developments which have been carried out in the area over the years. The proximity of the site is surrounded by overhead power lines, and business buildings at the growth point. The development is therefore expected to blend in well with the existing structures and infrastructures in the area. No significant impacts.

## Section 8

### 8. ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED CONSTRUCTION OF A SERVICE STATION AT ONYATI, ONYAANYA CONSTITUENCY OF OSHIKOTO REGION

#### 8.1 EMP Administration

This section of the report serves to prescribe mitigation measures to reduce, limit, eliminate or compensate for impacts, to acceptable or insignificant levels. In setting mitigation measures, the practical implications of executing these measures are considered. With early planning at all level of implementation, both the cost and the impacts can be effectively eliminated or minimized to insignificant levels.

This section also outlines the roles and responsibilities of all stakeholders to ensure that the EMP is fully implemented. The proponent has extensive experience in managing service station, and therefore will ensure the successful implementation of the EMP and its administration.

##### 8.1.1 Socioeconomic impacts:

TABLE 6: ASSESSMENT OF IMPACTS ASSOCIATED WITH SOCIOECONOMIC IMPACTS AND MITIGATION

<b>Socioeconomic Impact</b>	Nature	The proposed service station will support the socio-economic development of the people of Onyati Village. Energy plays a crucial role in economic growth and development. The proposed service station will create employment opportunities during its construction and operational phases. 25 people will be
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		employed during construction and 10 people during operation. Positive Impact.
	Extent	Local
	Duration	Permanent: more than 10 years
	Frequency	10 to 100 years.
	Reversibility	
	Likelihood of Occurrence	Highly likely: Is expected to occur in most circumstances
	Mitigation	<p>The proponent should timely and continuously communicate and distribute information to the local community to reduce potential sense of social marginalization, but to make the community understand and participate in the benefits associated with the construction of the service station. For instance:</p> <ul style="list-style-type: none"> <li>• The contractor should employ local labour from Onyati surrounding villages where possible.</li> <li>• The employment criteria and requirements should be formalised. All unskilled labour should be sourced from local communities.</li> <li>• Provisions promoting gender equality pertaining to recruitment should be included within bidding documents concerning the construction.</li> <li>• Promote skills development and training for the employees. The successful operation of the proposed business depends on a</li> </ul>

		<p>competent team of staff, and consequently a success energy sector is crucial for GDP growth.</p> <ul style="list-style-type: none"> <li>The proponent must ensure that the contractor is indeed following the guidelines as prescribed in this EMP.</li> </ul>
	Responsible party	Proponent

### 8.1.2 Air Quality Impacts

TABLE 7: ASSESSMENT OF AIR QUALITY IMPACTS AND MITIGATION

<b>Dust Impacts</b>	Nature	<p>The use of heavy industrial machinery will emit dust that will impact the air quality. Dust might also arise during the excavation of trenches were the foundation will be laid, the clearing of vegetation and levelling of land will also result in dust.</p> <p>The air quality can also be impacted during operation. The hydrocarbon vapours contains volatile organic compounds, which harm human health and contribute to ozone pollution. Negative impact.</p>
	Extent	Site specific. Depending on the wind speed
	Duration	Short term
	Frequency	Less than a year
	Reversibility	This impact is reversible: naturally
	Likelihood of Occurrence	Likely to occur



	Mitigation	<ul style="list-style-type: none"> <li>• Dust suppression techniques should be employed if the specific activity is likely to create dusty atmospheric conditions in excess of the periodic extremes.</li> <li>• Avoid activities that create excessive dust on extremely windy days. Personnel are required to wear personal protection equipment (PPE) such as dust masks if excessive dust is created for prolonged working periods.</li> <li>• Using water to suppress dust is not an option due to water shortage, but can be limited to the vehicle tracks only.</li> <li>• Employees should not be exposed to prolonged and excessive hydrocarbon vapours without protective gears</li> <li>• Vehicles and equipment should not be left with running engines while idling during construction.</li> <li>• Comply with EMP</li> </ul>
	Responsible party	SHE officer and Site Manager

### 8.1.3 Noise Impacts:

TABLE 8: ASSESSMENT OF IMPACTS ASSOCIATED WITH NOISE IMPACTS AND MITIGATION

Noise impact	Nature	Construction vehicles and equipment such as Loader Backhoes, Concrete mixer, other machineries used
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		in the construction phase can be a nuisance and disturbance. Negative impact
	Extent	Site specific
	Duration	Short term
	Frequency	Less than a year
	Reversibility	Noise will have an impact on employees, residents and animals such as birds and reptiles. Birds are known to abandon their nests if subjected to continuous noise. However they can return if the noise stops. Hence, this impact is reversible: naturally
	Likelihood of Occurrence	Likely
	Mitigation	<ul style="list-style-type: none"> <li>• Noise should be reduced by switching off machines that are not used and at sleeping hours.</li> <li>• All employees on site must be equipped with proper PPE (ear plugs, ear muffers) to be used when the noise above 80 Hz.</li> <li>• Service equipment and trucks regularly to avoid excess noise.</li> <li>• Comply with EMP.</li> </ul>
Responsible party	SHE officer and Site Manager	

#### 8.1.4 Sewage

TABLE 9: ASSESSMENT OF IMPACTS ASSOCIATED WITH SEWAGE AND MITIGATION

<b>Sewage impact</b>	Nature	Sewage will be generated by the service station ablution facilities. It is therefore very important to construct appropriate infrastructure for the
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		management of this type of waste. Failure to manage waste properly will result in pollution and this might have a detrimental impact on the people's well-being and the quality of the environment, especially those that live in the vicinity of the development. Negative impact
	Extent	Local
	Duration	Long term
	Frequency	Less than a year
	Reversibility	The impact is Reversible: artificially
	Likelihood of Occurrence	Likely: Will probably occur during the life of the project
	Mitigation	<ul style="list-style-type: none"> <li>• The project must install storm water infrastructure to maintain existing natural water flow channels.</li> <li>• A Septic tank should be constructed and all sewer drainage system should be constructed and connected to that septic tank.</li> <li>• The Service Station should also apply for Waste Water Discharge Permit from the Department of Water Affairs.</li> <li>• The sewer lines should be inspected regularly to look for any leakages.</li> <li>• A registered contractor should be hired to remove the solid waste, to prevent overload /overflow, and to do maintenance.</li> </ul>

		<ul style="list-style-type: none"> <li>Developing a Sewerage Waste Management Plan.</li> </ul>
	Responsible party	SHE officer, Site Manager, and Proponent

### 8.1.5 Health and Safety Impacts:

TABLE 10: ASSESSMENT OF IMPACTS ASSOCIATED WITH HEALTH AND SAFETY AND MITIGATION

<b>Health and safety</b>	Nature	<p>Firstly, the potential impacts on human health and safety resulting from project activities could include occupational accidents and injuries, vehicle accidents, exposure to weather extremes, adverse health effects from dust generation and emissions, and contact with hazardous materials.</p> <p>Secondly, hydrocarbons are hazardous and hence the inhalation of fumes should be prevented. Fuel, oil spills and water at the service station can put workers and customers at the risk falling.</p> <p>Thirdly, the use of compressed air to fill tires can also be dangerous. Although it is not common, tyre explosion can be extremely dangerous to the employees. High pressure from the air compressor can also shoot small objects from the floor that can pierce people.</p> <p>Fourthly, theft and robbery put the lives of employees of service stations at risk. Measures should be put in place for their safety.</p> <p>Negative</p>
	Extent	Site specific
	Duration	Medium term

	Frequency	Less than a year
	Reversibility	
	Likelihood of Occurrence	Rare
	Mitigation	<ul style="list-style-type: none"> <li>• The intersection of the access road to the service station site must be designed and submitted to the Roads Authority for approval before actual construction.</li> <li>• Procedures for dealing with injuries or accidents must be in place and all contact details for emergency personnel should be available.</li> <li>• There should be a compulsory safety induction programme (tool box talk) for all employees.</li> <li>• Proper PPE should be issued to avoid injury or death.</li> <li>• The employees should be well oriented with the Health and Safety plan. The service should also be kept tidy, and floors must be kept dry to avoid slippery related injuries.</li> <li>• Comply with EMP</li> </ul>
Responsible party	SHE officer and Site Manager	

### 8.1.6 Fire Risk and Control

TABLE 11: ASSESSMENT OF IMPACTS ASSOCIATED WITH FIRE RISK AND MITIGATION

<b>Fire Risk and Control</b>	Nature	Hydrocarbons are extremely flammable. Fire explosion should be prevented at all costs during the operation of service station.
	Extent	Site specific
	Duration	Medium term
	Frequency	Less than a year
	Reversibility	
	Likelihood of Occurrence	Rare
	Mitigation	<ul style="list-style-type: none"> <li>• Fuel is extremely flammable. All fuel should be handled according to Material Safety Data Sheet instructions.</li> <li>• SANS requirements should be adhered to in order to prevent fire explosion.</li> <li>• Comply with EMP</li> </ul>
	Responsible party	SHE officer, Site Manager and Proponent

### 8.1.7 Solid and Harzadous Waste:

TABLE 12: ASSESSMENT OF IMPACTS ASSOCIATED WITH SOLID AND HAZARDOUS WASTE MANAGEMENT AND MITIGATION

<b>Solid and hazardous waste management</b>	Nature	Potential impacts from improper housekeeping practices during construction such as illegal disposal of waste to land could contaminate and pollute the soil which in turn could pollute the Environment and the visual appearance. Solid waste such as lumber, steel scrap, plastics, cement bags, bricks, general rubbish and domestic waste will be generated during the construction phase.
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		There is a potential environmental contamination and degradation from waste on site. Negative impact.
	Extent	Site Specific
	Duration	Medium term: months, less than a year
	Frequency	Less than a year
	Reversibility	Waste produced during the construction phase can be reduced by proper housekeeping. Hence it is reversible: artificially
	Likelihood of Occurrence	Possible
	Mitigation	<ul style="list-style-type: none"> <li>• A skip containers of adequate design and capacity should be provided for solid waste, such as discarded cans and bottles.</li> <li>• Proper facilities for storage and disposal of used and waste oil and gas must also be provided.</li> <li>• The construction site should be kept tidy at all times. All domestic and general construction waste produced on a daily basis should be cleaned and contained daily.</li> <li>• No waste may be buried or burned.</li> <li>• Waste containers should be emptied regularly and removed from site to an approved waste disposal site.</li> <li>• All recyclable waste needs to be taken to the nearest recycling depot.</li> </ul>

		<ul style="list-style-type: none"> <li>• Construction labourers should be sensitised to dispose of waste in a responsible manner and not to litter.</li> <li>• Waste may not remain on site after the completion of the project.</li> <li>• Comply with EMP.</li> </ul>
	Responsible party	SHE officer and Site Manager

### 8.1.8 Traffic Congestion

TABLE 13: ASSESSMENT OF IMPACTS ASSOCIATED WITH TRAFFIC CONGESTION AND MITIGATION

<b>Traffic Congestion</b>	Nature	The proposed Onyati fuel service station will have slight effect on the traffic flow along the B1 Main Road as vehicles are expected to slow down when approaching the service station. However the impact will be minimal because of the strategic location of service station near the T –junction, as vehicles are expected to slow down at the junctions anyway. Negative impact.
	Extent	Site Specific
	Duration	Medium term: months, less than a year
	Frequency	Less than a year
	Reversibility	It is reversible: artificially with construction of acceleration and deceleration lanes.
	Likelihood of Occurrence	Possible
	Mitigation	<ul style="list-style-type: none"> <li>• The project should apply to the Roads Authority to install the application traffic</li> </ul>



		<p>flow control road infrastructure, mechanisms and road signage for road safety.</p> <ul style="list-style-type: none"> <li>• The traffic flow will also be enhanced by providing sufficient parking space at the station,</li> <li>• Constructing of acceleration and deceleration lanes at the B1 main road.</li> <li>• Comply with EMP.</li> </ul>
	Responsible party	SHE officer and Site Manager

### 8.1.9 Soil and undergroundwater pollution

TABLE 14: ASSESSMENT OF IMPACTS ASSOCIATED WITH SOIL AND UNDERGROUNDWATER POLLUTION AND MITIGATION

<b>Soil and undergroundwater Pollution</b>	Nature	The inappropriate storage and handling of hydrocarbon products present a risk to groundwater and soil pollution. Negative impact
	Extent	Local
	Duration	Long term
	Frequency	Less than a year
	Reversibility	
	Likelihood of Occurrence	Rare
	Mitigation	<ul style="list-style-type: none"> <li>• Fuel tanks and fuel dispensers should be designed and installed in line with SABS and the manufacturer's recommendations. Installation should be done with care as damage can occur during installation.</li> </ul>

		<ul style="list-style-type: none"><li>• If the water table is high, a single steel walled tanks or double-walled steel tank, should be installed.</li><li>• Moreover, suitable sand shall also be used for both bedding and backfilling of steel tanks.</li><li>• Hazardous substances or chemicals should be stored in a specific location on an impermeable surface that is banded.</li><li>• Heavy construction vehicles and equipment on site should be provided with a drip tray.</li><li>• To mitigate the potential impact of groundwater and soil pollution, the ground level surfaces of the project site must be covered with an impermeable material.</li><li>• The drip trays should be cleaned daily and spillage handled, stored and disposed of as hazardous waste.</li><li>• Maintenance and washing of construction vehicles should be take place only at a designated workshop area.</li><li>• The workshop should have an oil-water separator for collected run-off from washing.</li></ul>
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		<ul style="list-style-type: none"> <li>Spilled cement and concrete materials should be treated as hazardous waste and disposed of daily in the appropriate hazardous waste containers.</li> </ul>
	Responsible party	SHE officer, Site Manager, and Proponent

### 8.1.10 Biodiversity Loss

TABLE 15: ASSESSMENT OF IMPACTS ASSOCIATED WITH BIODIVERSITY LOSS AND MITIGATION

<b>Biodiversity loss</b>	Nature	There is no protected plant species that were observed onsite. However the site has a few shrubs of <i>Pechuel-loeschea leubnitziae</i> (locally known as <i>iizimba</i> ), two acacia karroo and grass species of <i>Eragrostis trichophora</i> .  Negative impact
	Extent	Site specific
	Duration	Long term (resulting in permanent change in the natural biodiversity on site)
	Frequency	1 to 10 years
	Reversibility	Irreversible: permanent damage
	Likelihood of Occurrence	Highly likely
	Mitigation	<ul style="list-style-type: none"> <li>The impact will also be low due to the fact that there is no plant species that is endemic to the area.</li> <li>The few trees and shrubs will be affected by the development, hence the need to plant more trees in the vicinity to improve the environment.</li> </ul>

		<ul style="list-style-type: none"> <li>• Comply with EMP.</li> </ul>
	Responsible party	SHE officer and Site Manager

### 8.1.11 Operation within Law Framework

Besides the mitigation measures, the proposed development activities should be carried out within the law framework. For instance, the Hazardous Substances Ordinance, 1974 directs that the manufacturing, storage, handling and processing of a hazardous substance should be done in line with the ordinance. It also regulate the construction of service stations and facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid, petroleum, gas or paraffin. The proponent should implement necessary measure and take precaution throughout the product lifecycle: from receiving, storage, product use and disposal. In cases were special storage facilities are required the Proponent should provide as such.

It is also the responsibility of the proponent to ensure that new regulations that may be introduced by the Ministry of Mines and Energy are adhered to.

## Section 9

### **9. DECOMMISSIONING, CONCLUSION AND RECOMMENDATIONS**

#### **8.2 9.1 Decommissioning**

A separate EIA process should be conducted before considering at all the decommissioning of the project.

#### **8.3 9.2 Conclusion**

The proposed construction of Onyati Service Station is an important project to the development goals and aspirations of the receiving local community, region, Namibia as a whole as well as to the proponent.

Overall, the economic benefits of the project outweigh the limited negative impacts on the natural environment. The project is expected to perform positively if all mitigation measures are adhered to.

#### **8.4 9.3 Recommendations**

It is recommended **that:**

- i. The Ministry of Environment, Forestry and Tourism should consider issuing an Environmental Clearance Certificate for the Proposed of a Service Station at Onyati Village in Onyaanya Constituency of Oshikoto Region.*
- ii. The Proponent, Tatekulu Fillemon Shuumbwa will commission Professional Enginneers and Project Managers to oversee, supervise, monitor and control all activities at the construction site thereby ensuring that the construction work is conducted in an orderly and safe manner, hence safeguarding the environment in the interest of the current and future generations to come.*

## **10. REFERENCES**

A, Curtis, Eds.). Windhoek: Macmillan Education Namibia.

C. A. Mannheimer & B. Mendelsohn, J., Obeid, S. El, & Roberts, C. (2000). Profile of north-central Namibia. Windhoek: Gamsberg Macmillan Publisher.

Curtis, B. and Mannheimer, C. 2005. Tree Atlas of Namibia. National Botanical Research Institute, Windhoek, Namibia

Government Gazette, 27 December 2007. No. 3966, Act No. 7, 2007 Environmental Management Act 2007.

Le Roux, P., and Müller, M. (2009). Trees and Shrubs of Namibia.

Müller, M.A.N. 1984. Grasses of South West Africa/Namibia. John Meinert Publishers (Pty) Ltd, Windhoek, Namibia.

Newmans, K. Birds By Colour, Sourthern Africa Common Birds Arranged by Colour, Struik New Holland Publishing (Pty) Ltd 2000

Oshikoto Region : II . The Colophospermum mopane shrublands, (January 2000).

Strohbach, B. J. (2014). Vegetation degradation trends in the northern Oshikoto Region : II.  
The Colophospermum mopane shrublands Vegetation degradation trends in the northern

# 11. Apendix

## 11.1 Annexure 1:

Confidante 08<sup>th</sup> July 2022

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### Top Footballer, Cloete, arrested for stock theft

• BY TRACY TAFIRENYIKA



**F**ORMER Orlando Pirates Captain and Brave Warriors player Riaan Cloete was on Tuesday arrested on suspicion of stock theft at Dorbabib, Police Spokesperson, for the Khomas region Warrant Officer confirmed in Confidante.

According to Shipandeni, Cloete was arrested alongside four other suspects for allegedly stealing a Brahman Cow valued at 15000 NAD.

Shipandeni said a police patrol vehicle on Tuesday intercepted a white Hyundai with a full carcass of a cattle meat. Cloete was the driver at the time. Their investigations on the source of the meat led them to Farm Barack where the cow was allegedly stolen from.

Shipandeni said further investigations revealed that the vehicle that was used to steal the cow belongs to a certain police officer from VIP Directorate.

"The cow is a barman valued at N\$15 000. The whole carcass was recovered and five suspects are arrested and charged including the 40 years old driver who happens to be the former Brave warriors and African Stars player", Shipandeni said.

The suspects are set to appear in Katutura Magistrate Court on Friday 08th July.

Commercial farmers in both Khomas and Omaheke regions, who spoke to Confidante said they are concerned about the rise in cases of stock theft.

The farmers said they are losing millions in potential revenue to stock theft and called on the Namibian police to be ruthless when dealing with perpetrators.

Last year, farmers in the Kalkfeld and Omaruru area lost about N\$324 000 worth of cattle.

The amount could be even higher if unborn calves from pregnant cows are included.

In October, there were 41 cases of stock theft reported in the Otjozondjupa and Erongo regions, with 29 arrests.

VNV//Confidante



### PDM's youngest MP vows to tackle youth unemployment



• BY TRACY TAFIRENYIKA

**N**EWLY elected and youngest member of parliament for the Popular Democratic Movement (PDM), Maximilian Katjtmune, has vowed to improve the high unemployment rate among young people stating that it is massive and requires a multifaceted approach to arrest.

With the unemployment rate currently standing at 46 percent, Katjtmune said that his first move to address youth unemployment will not read. It is indeed an honor to having been afforded the privilege of representing my political party as its youngest member at 24 in Parliament", katjtmune said.

"Being an MP at such a young age is not something that I take lightly, and is a fundamental responsibility. The Namibian people, through universal suffrage, elect Members of Parliament and mandate us to be the representatives of all Namibians, and that is a sacred duty I do not take lightly," he stated.

**BUSINESS SUCCESS CONSULTING**  
*empowering your business success*

**PUBLIC INVITATION**  
ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF A SERVICE STATION AT ONYATI, ONYAMANYA CONSTITUENCY, OSHKOTO REGION

Notice is hereby given to all Interested and Affected Parties (I & APs) that an application will be made to the Environmental Commissioner in terms of Environmental Management Act No. 7 of 2007 and its regulations (GN 30 of 6 February 2012) for the following intended activities:

Project Name: CONSTRUCTION OF A SERVICE STATION  
Project Location: ONYATI VILLAGE, OSHKOTO REGION  
Project Description: CONSTRUCTION OF A SERVICE STATION AT ONYATI  
Proponent: TATEKULU FILLEMON SHULUMWA NANGOLO

All Interested and Affected Parties (I & APs) are encouraged to register and provide comments and opinions to [becongwediva@gmail.com](mailto:becongwediva@gmail.com). If you want to register as I & APs and receive the Background Information Document, please contact our office:

Contact No: 0811622154  
Email: [becongwediva@gmail.com](mailto:becongwediva@gmail.com)

**DEADLINE FOR COMMENTS IS 12 JULY 2022**

**EPIC Environmental Consultancy cc**

**CALL FOR PUBLIC PARTICIPATION**



# Top Footballer, Cloete, arrested for stock theft



• BY TRACY TAFIRENYIKA

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VNV/Confidante



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www.businesssuccessconsulting.com

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**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF A SERVICE STATION AT ONYATI, ONYANYA CONSTITUENCY, OSHANOTO REGION**

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**Proponent:** TATEKULU FILLEMON SHLUMBWA NANGOLO

All interested and Affected Parties (I & APs) are encouraged to register and provide comments and opinions to [bscngw@viva@gmail.com](mailto:bscngw@viva@gmail.com). If you want to register as I & APs and receive the Background Information Document, please contact our office:

Contact No: 0911622154  
Email: [bscngw@viva@gmail.com](mailto:bscngw@viva@gmail.com)

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## PDM's youngest MP vows to tackle youth unemployment



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**EPIC Environmental Consultancy cc**

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**CALL FOR PUBLIC PARTICIPATION**

# CLASSIFIEDS

Tel: (061) 2080844 Fax: (061) 220584  
 Email: Classifieds@nepc.com.na

Notices	Notices	Notices	Notices
Legal Notice	Legal Notice	Legal Notice	Legal Notice

**GENERAL NOTICE**  
 No 2021

**SWAKOPMUND DRAFT ZONING SCHEME NO. 69**

Notice is hereby given in terms of Section 45 (4) of the Urban and Regional Planning Act, 2018 (Act No. 5 of 2018), that the Swakopmund Draft Zoning Scheme No. 69 has been submitted to the Minister of Urban and Rural Development for approval.

Copies of the Swakopmund Draft Zoning Scheme No. 69 and the maps, plans, documents and other relevant matters are lying open for inspection during office hours at the Municipality of Swakopmund and also at the Urban and Regional Planning Board, Ministry of Urban and Rural Development: Division: Planning, 2<sup>nd</sup> Floor, Room No. 237, GRN Office Park, Windhoek.

Any person, who wishes to object to the approval of the Zoning Scheme, should lodge objection in writing to the Secretary, Urban and Regional Planning Board, Private Bag 15209, Windhoek on or before the 6 July 2022.

**L.D. UYEPA**  
 CHAIRPERSON  
 URBAN AND REGIONAL  
 PLANNING BOARD

**GENERAL NOTICE**  
 No 2022

**OKONGO EXTENSION 14: ESTABLISHMENT OF THE TOWNSHIP – VILLAGE COUNCIL OF OKONGO**

Notice is hereby given in terms of Section 107(1) of the Urban and Regional Planning Act, 2018 (Act No. 5 of 2018), that application has been made for the establishment of the township Okongo

**NOTICE**

Please take note that Kamau Town Planning and Development Specialist has been appointed by the Tsumeb Municipality, to apply to the Urban and Regional Planning Board for the:

- Disestablishment of a township on Portion 34 of the remainder of Tsumeb Townlands No.737 known as Tsumeb Extension 11.
- Cancellation of General Plan No. B211 of the township of Tsumeb Extension No.11.
- Establishment of a township on Portion 34 of the remainder of Tsumeb Townlands No.737 known as Tsumeb Extension 11.
- Subdivision of portion 34 of the remainder of Tsumeb Townlands No.737 into 178 erven and the remainder (Street).

Notice is further given to all interested and affected parties (I & APs) that an application will be made to the Environmental Commissioner in terms of Environmental Act (No7 of 2007) and its Regulations (2012) for the establishment of Extension 11, Tsumeb:

**Project Name:**  
 Tsumeb Extension 11  
**Environmental Consultant:**  
 Kamau Town Planning and Development Specialist

Kamau Town Planning and Development Specialist has been appointed to conduct an Environmental Impact Assessment of the said development.

Due to the current status quo of COVID-19, the public meeting will be restricted to 50 participants for comments and engagements, however, the

regarding the rezoning, visit the Kamau Town Planning and Development Office (4 Wagner Street - Windhoek), or the Department of Town Planning of the Tsumeb Municipality and at the Urban and Regional Planning Board Offices (Government Park - Windhoek).

(b) any person having objections to the rezoning concerned or who wishes to comment, may in writing lodge such objections and comments, together with the grounds, with the Chief Executive Officer of the Tsumeb Municipality, and with the applicant within 14 days of the last publication of this notice, i.e. no later than 29 June 2022.

**FOR MORE INFORMATION AND QUERIES, KINDLY CONTACT:**  
 No. 04 Wagner street | Windhoek west |c: +264 61 729 0146  
 P.O. Box 22295 |Windhoek |c: +264 61251975| +264 61 304219  
 | yet@kamau-pds.com |w: www.kamau-architects.com



**Obituary**  
 In Memoriam

*In Loving Memory*

**PUBLIC INVITATION ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF A SERVICE STATION AT ONYALI, ONYALI CONSTITUENCY, OSHANOTO REGION**

Notice is hereby given to all Interested and Affected Parties (I & APs) that an application will be made to the Environmental Commissioner in terms of Environmental Management Act No. 7 of 2007 and its regulations (GN 30 of 6 February 2012) for the following intended activities:

**Project Name:**  
 Construction of a service station  
**Project Location:** Onyali Village, Oshanaoto Region  
**Project Description:** construction of a service station infrastructure  
**Proprietor:** Talekula Filimon Shumbwa Nangdo

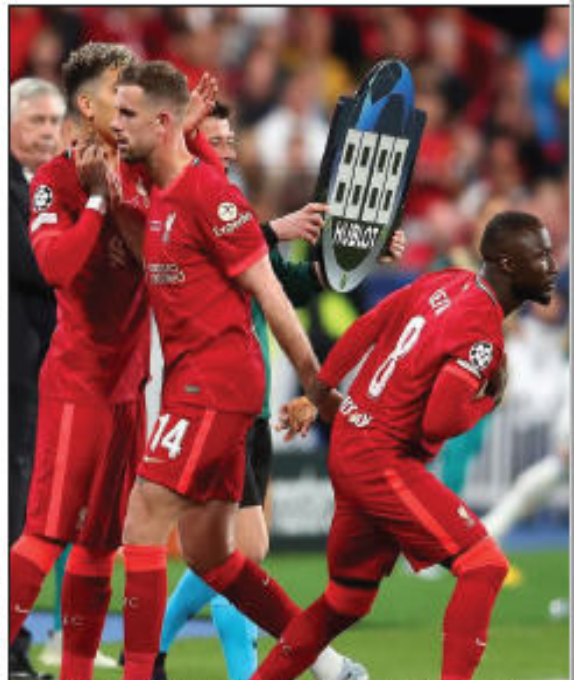
All interested and Affected Parties (I & APs) are encouraged to register and provide comments and opinions to beorgvediva@gmail.com. If you want to register as I & APs and receive the Background Information Document, please contact our office:  
 Contact No: 0811822154  
 Email: beorgvediva@gmail.com

**BDO Office at Erf 5059**  
 Oranienb Str. Ongwediva

**Deadline for Comments is 22 June 2022**



**Obituary**  
 In Memoriam



Increased... Fifa members decided to increase the maximum number of named substitutes from 12 to 15 at the discretion of the competition organiser. Photo: Nethriani's Data

## Five-substitute option in top-level competitions approved

At its 136th annual general meeting (AGM) held in Doha, Qatar, the International Football Association Board (Ifab) ratified the changes and clarifications to the Laws of the Game 2022/23, which will come into effect on 1 July

At this meeting, the Ifab accepted the recommendations from the annual business meeting (ABM), the meeting of the Football and Technical Advisory Panels (FAT-TAP), and the strong support from the entire football community that this option





### 11.3 Annexure 4: Consent from Traditional Authority



18 July 2022

#### TO WHOM IT MAY CONCERN

This letter serves to certify that His Majesty Fillemon Shuumbwa Nangolo ID **78060910094** have been allocated a lease hold right on the land parcel at Onyati village of Uukwanambwa Traditional District for business purpose of establishing a Fuel Service Station.

This letter further grant consent to Mr. Matatias Moses to conduct survey on that land parcel.

The Ondonga Traditional Authority favours the development initiative for projects of this nature as it creates job opportunities for our people and help in eradicating poverty amongst our community.

Thus, your cooperation and kind assistance will be highly appreciated.

Yours sincerely,

  
  
FRANS ENKAI  
SECRETARY: ONDONGA TRADITIONAL AUTHORITY