ENVIRONMENTAL IMPACT ASSESSMENT FOR:

OTJIMBINGWE SERVICE STATION

A DEVELOPMENT ON ERF 266 OTJIMBINGWE

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Project Details	
Project Title	The proposed development of the *Otjimbingwe Service Station* is planned for a parcel of land situated on Erf 266 Otjimbingwe *GPS Position:* -22.3578414S 016.12812E. The envisioned project entails the construction of a standard service station with 2 dispensing pumps (petrol and diesel) with 2 double walled Underground Storage Tanks of 45 cubic meters. The service station will also have a canopy covered forecourt, ablutions, tyre fitment & oil changing facilities, convenience store and street upgrading in order to provide safe access to the proposed service station.
Environmental Clearance:	Environmental Clearance Certificate to be issued in the name of the Proponent and, a copy sent to the Environmental Assessment Practitioner.
Report status:	Environmental Impact Assessment report
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ABBREVIATIONS

ATM:	Automatic Teller Machine
CBD:	Central Business Disctrict
EIA:	Environmental Impact Assessment
EAP:	Environmental Assessment Practitioner
EMP:	Environmental Management Plan
ESMP:	Environmental Scoping & Management Plan
ECC:	Environmental Clearance Certificate
ECO:	Environmental Control Officer
EO:	Environmental Officer
HSES:	Health Safety Environmental and Social
RA:	Roads Authority
RAM:	Rapid Assessment Method
NHC:	National Heritage Council
EMA:	Namibia Environmental Management Act (No. 7 of 2007)
MET:	Ministry of Environment and Tourism:
DEA:	Directorate of Environmental Affairs
MME:	Ministry of Mines and Energy
NEP:	National Energy Policy
IAP:	interested and affected parties
TPS:	Swakopmund Town Planning Scheme
IUCN:	International Union for Conservation of Nature
LNAPL:	Light Non-Aqueous Phase Liquids
MSDS:	Material Safety Data Sheet
NaCl:	Sodium chloride
PPE:	Personal Protective Equipment
PPM:	Parts per million
SANS:	South African National Standards
SLAM:	Stop – Look – **Assess** – Manage
UNCCD:	United Nations Convention to Combat Desertification
WHO:	World Health Organization

GLOSSARY

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" option 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.

Assessment - The process of collecting, organising, analysing, interpreting and communicating information relevant to decision making.

Competent Authority - means a body or person empowered under the local authorities act or Environmental Management Act to enforce the rule of law.

Construction - means the building, erection or modification of a facility, structure or infrastructure that is necessary for the undertaking of an activity, including the modification, alteration, upgrading or decommissioning of such facility, structure or infrastructure.

Cumulative Impacts - in relation to an activity, means the impact of an activity that in itself may not be significant but may become significant when added to the existing and potential impacts eventuating from similar or diverse activities or undertakings in the area.

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 Impact Assessment (EIA) - process of assessment of the effects of a development on the environment.

Environmental Management Plan (EMP) - A working document on environmental and socioeconomic mitigation measures, which must be implemented by several responsible parties during all the phases of the proposed project.

Environmental Management System (EMS) - An Environment Management System, or EMS, is a comprehensive approach to managing environmental issues, integrating environment-oriented thinking into every aspect of business management. An EMS ensures environmental considerations are a priority, along with other concerns such as costs, product quality, investments, PR productivity and strategic planning. An EMS generally makes a positive impact on a company's bottom line. It increases efficiency and focuses on customer needs and marketplace conditions, improving both the company's financial and environmental performance. By using an EMS to convert environmental problems into commercial opportunities, companies usually become more competitive.

Evaluation – means 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 - means 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 (IAPs). The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered stakeholders.

Sustainable Development - “Development that meets the needs of the current generation without compromising the ability of future generations to meet their own needs and aspirations” – the definition of the World Commission on Environment and Development (1987). “Improving the quality of human life while living within the carrying capacity of supporting ecosystems” – the definition given in a publication called “Caring for the Earth: A Strategy for Sustainable Living” by the International Union for Conservation of Nature (IUCN), the United Nations Environment Programme and the World Wide Fund for Nature (1991).

EXECUTIVE SUMMARY

The proponent, Nambaza Investments cc, plans to develop a service station in Otjimbingwe. The project Environmental Impact Assessment (EIA) presents an assessment of the potential environmental, occupational health and safety, social and community impacts of developing a service station. It subsequently proposes risk mitigation measures and design enhancement as part of the Environmental Management Plan (EMP). The findings of this analysis reveal that the development of a service station does not pose negative impacts on the environment. The impact assessment conducted reveal net positive impacts on the community which include the creation of employment, economic development and service delivery to Otjimbingwe.

1. INTRODUCTION

1.1 Background

Otjimbingwe is a settlement situated on the banks of the Swakop River in the Erongo Region. It is one of Namibia's oldest village, and accordingly boasts some of the oldest architecture in the country. Established in the 18th century Otjimbingwe served as Namibia's first capital under the German Colonial Government from 1847 to 1862 (www.ellerstrand.com). Since the 18th unto this date, Otjimbingwe is used as a capital by the Herero under the Zeraua house, and by the Damara under the |Khomanin and Tsoaxudaman stem.

Due to its rich history, Otjimbingwe has many historic landmarks. The Rhenish church in the settlement's centre is one of the settlement's main attractions. Constructed in 1867 and proclaimed a National Monument in 1974, it is Namibia's oldest church.

Figure 1: Rhenish Mission Church in Otjimbingwe

Despite the rich history, Otjimbingwe has seen very little development. Today, Otjimbingwe is home to roughly 8000 inhabitants, a primary school, a high school, a clinic, police office, and three government offices. Thus apart from community farming, Otjimbingwe has very little economic activity. The village has campaigned to bring development to highlight its significands in the history of Namibia – with little luck.

It is on this backdrop that the proponent, Dr. Abisai Konstantinus (t/a Nambaza Investments cc) saw the need to develop and operate a service station (the project/site) in Otjimbingwe. The service station will be named after the village ~ Otjimbingwe, will form part of a community centre that will include a fuel station, general retail shop, post office, museum and an Agri-store to add the much-needed services to the village. The overall objective of this development is to bring services to the people.

The remainder of this document reports on the Environmental Impact Assessment conducted as a priori to the proposed project.

1.2 Project Details

1.2.1 Technology & Installations

The envisioned project is a Shell branded fuel station. It will be a standard service station with 2 dispensing pumps for petrol and diesel. The following technology will be installed:

- Two underground tanks (46m^3): 1 unleaded petrol and 1 diesel UST (50ppm)
- The tanks will be installed with suitable reticulation systems, three chamber separator pit and two pump islands,
- Forecourt canopy,
- And a pedestrian walkway and duct, backyard paved area, driveways and parking.

Figure 2: Artist impression of the Otjimbingwe fuel station

1.2.2 Other Amenities

In line with the vision of the project, to bring services closer to the people, the following amenities will be developed as part of the project:

- Tyre fitment centre: A minimalist tyre fitment centre will be installed to provide general tyre maintenance and fitment. The tyre fitment centre will also offer an oil exchange platform for cars.
- An agri-market: that will offer popular agriculture items on demand. Popular items in this part of the country include animal feed, salt blocks for animals and major tools for agriculture. The proponent will partner with a popular agriculture outlet to offer these services seamlessly.
- A grocery outlet that will also act as the fuel station pay-point.
- Overnight security. This is expected to encourage overnight stop-over facilities at any time of the day. Moreover, the service stations will be installed with 24-7 surveillance system
- consisting of cameras and alarm systems.
- ATMs: Automatic teller machines and speed points from major banks will be installed on the premises.

1.3 Rational of Assessment

The construction, operations and decommissioning activities of fuel stations requires compliance with the Environmental Management Act (Act no. 7 of 2007). The Environmental Impact Assessment (EIA) Regulations of 6 February 2012 (EIA Regulations) are promulgated in the Government Notice No 28, 29 and 30, and therein details the EIA process. This Environmental Compliance Certificate (ECC) application is thus in support of the construction and operation of a fuel/service station on the site.

The EIA regulations (under section 3), requires the proponent to "designate an environmental assessment practitioner to manage the assessment process." In line with this requirement, the proponent appointed Mr. Julius Antonius as an independent environmental consultant (Environmental Assessment Practitioner: EAP), to undertake the EIA process.

In terms of the EIA regulations, the proposed project requires an EMA EIA Scoping Process in terms of the EIA Regulations (GN no. R4878) as follow:

- Section 9.1: The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974.
- Section 9.4: The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location.
- Section 9.5: Construction of service stations or any other facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid, petroleum, gas or paraffin.

In line with the above, Environmental baseline information (EBI) must be carried out and prepared as part of an Environmental Impact Assessment (EIA) study of the site. Subsequently, the competent authority is required to undertake an assessment of this EIA and issue an Environmental Clearance Certificate if they are satisfied that all aspects and hazards are addressed, and proper and sufficient mitigation controls have been proposed. On this backdrop, this report has specific objectives as follow:

- To obtain approval from the Ministry of Environment and Tourism for the project
- To provide a project overview, a background on the operational guidelines, existing laws and regulations involved in operating the service station.
- Provide a baseline study of the original status of the environment in the project site before the development of the project. This included bio-physical environment and socio-economic conditions.
- Provide an analysis of the potential environmental impacts.
- Present the preparation of an environmental management plan for the project.
- Finally, present the compiled EIA report.

1.4 Need and Desirability

The development of a service station supports the objectives of the Otjimbingwe Village council's vision to encourage and facilitate economic development. More investors mean more revenue will be generated by the council to improve services and create more land for housing. As more investors will be attracted to Otjimbingwe, employment opportunities will also be created. This will increase the number of people paying taxes and in turn generate more money for the government. Council will also benefit from this because when more people are employed more people will be able to afford items sold in the shops and pay rates and taxes. Consequently, the local economy will be stimulated.

The development of Otjimbingwe Service Station in Otjimbingwe will lead to employment creation during construction phase and during future operation phase where the business will render a service at a cost within the economy, employ staff and pay rates and taxes. The development will also increase the cost of rates and taxes which means council will be generating more money from rates and taxes and service charges then they previously did. The development of the site will furthermore add to the confidence of residents, existing and potential entrepreneurs, and visitors to Otjimbingwe.

Most importantly, the location is ideal for the proposed development as it is within the centrality of the village. The proposed development will only thrive well if it is located in an area where it is likely to be found by people. Adding a service station, grocery shop and additional service offerings such as a pharmacy to the area will also increase the quality of lives of the people as they have a variety of places to go to and are all within close proximity to each other.

Figure 3: One of the local shops in Otjimbingwe

1.5 Document Structure

The reminder of this document is structured as follow: section 2 provides the project overview, section 3 provides Environmental characterization and baseline assessment of the project, Section 4 reference all relevant legislation, Section 5 provides the impact assessment report, and section 6 concludes the EIA report.

2. RELEVANT LEGISLATION AND PROCESSES

2.1 Applicable Legislation and Policies

The EIA is guided by the Namibian Environmental Impact Assessment Policy of 1994 and the Namibian Environmental Management Act of 2007, which stipulates activities that may have a significant impact on the environment. Furthermore, strong sustainable development is ensured by the review of policies and legislation which is employed as sound guiding tools for the entire EIA process. Table 1 below provides a review of the relevant Namibian legislation that has a bearing on the project development. The review is laid out to provide the proponent and Council of the requirements and expectation before and during the construction, operational and decommissioning phases of the project.

Table 1: Applicable legislation, Policies and/or Guidelines

Act/Regulation	Brief Description	Applicability to Project
Namibian Constitution First Amendment Act 34 of 1998	The State shall actively promote… maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians" (Article 95(l)).	Ecological sustainability should inform and guide this EA and the proposed development
Environmental Management Act (7 of 2007)	Section 3 and 55 principles of environmental management	The principles should form the basis of key decisions in the project.
Environmental Impact Assessment Regulations (2012)	Provides guidelines for the EIA process.	The EIA consultants should adhere to the guidelines provided in these regulations.
Environmental Assessment Policy of Namibia (1995)	Seek to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process and that the term ENVIRONMENTAL is interpreted inclusive of biophysical, social economic, cultural, historical and political components.	All listed activities should be subjected to the EA procedures. The project requires authorisation from MET: DEA, which will be based on the findings of the detailed EIA study. This is EIA was done in accordance with the policy guidelines.
Groundwater Protection Regulations	Regulations provides for the protection of the groundwater resource in a formally documented and legislated EIA (scoping process).	Otjimbingwe Council should be instituted to ensure decisions are taken regarding the potential impacts on the natural environment.
The Public Health Act 36 of 1919 and subsequent amendments	This Act prohibits the existence of a nuisance i.e. noise and odors.	The proponent should be familiar with the provisions of this act and control nuisances accordingly.
Hazardous Substances Ordinance (14 of 1974) as amended by the	The ordinance controls substances with potential to cause injury or ill-health or death of human beings	Care should be taken throughout the product lifecycle: from receiving,

Atomic Energy Radiation Protection Act (2005)	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.	storage, product use and disposal. In cases were special storage facilities are required the Proponent should provide as such.
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.
Soil Conservation Act (No. 76 of 1969)	The act provides for the prevention and combating of soil erosion, conservation, improvement and manner of use of soil and vegetation and protection of water resources.	The EAP should adhere to the guidelines provided in these regulations.
Draft Pollution Control and Waste Management Bill	This bill aims to prevent and regulate the discharge of pollutants to air, water, and land. It further aims to promote the establishment of a system of waste management and enable Namibia to meet its international obligations.	Waste management to be guided by 3R principle: Reduce, Reuse and Recycle. Only unrecyclable and unusable materials must be disposed of at a designated disposal site.
Labour Act 11 of 2007, No. 156 Labour Act, 1992 and associate Regulations relating to the health and safety Of Employees at work	The Act governs employer to employee relationship including issues pertaining to occupational health and safety, remuneration, provision of appropriate protective clothing, grant of leave etc.	To be compiled by the project proponent during the planning phase and implemented by the Contractor during construction, operation and decommissioning.
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.
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	Environmental standards and avoidance of environmental harm caused by the keeping, handling, conveying, using and disposing of petroleum products must be done in line with these.
Road Traffic and Transport Act 22 of 1999; (as amended)	Obtain permission from Roads Authority to construct access route to site.	To be applied for from Roads Authority by the Contactor prior to commencement of Construction activities.
The Road Traffic and Transport Regulations, 2001	PART 4 of the regulations govern the transportation of dangerous goods.	The proponent must be guided by the provisions during the transport of any dangerous goods.

2.2 Key Industry Standard Requirements

The EIA process was also guided by the environmental best practices, engineering design controls and standards as Table 2 provides. These are required by Oil Companies and the Ministry of Mines and Energy (MME) in order to mitigate the risk that service stations pose.

Table 2: Applicable Industry Standard Requirements

Industry Standard	Brief Description
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 fuels

2.3 Methodology and EIA Process

The EIA was conducted in chronological steps as summerised in Table 3. The baseline information about the site and its surroundings was first obtained from existing secondary information as well as from a reconnaissance site visit. Subsequently, as part of the scoping process to determine potential environmental impacts, interested and affected parties (IAPs) were consulted for comments and opinions and these are put forward in this report. This process allowed assessment of the environmental impacts and subsequently the identification of the mitigation measures. These Mitigation measures were developed based on practical measures supported by research and scientific evidence. In addition, an environmental management plan (EMP) was prepared to give a guideline base to the project proponent on how the identified impacts can be mitigated and managed.

Table 3: The EIA Process

Phase	Brief Description
1. Clarifying terms of reference and leveling of expectations	Leveling of expectations – an opening meeting was held between the consultancy team and the Proponent. The purpose of the meeting was to clarify the methodology, communication process between the Consultants and the Proponent, time frame and expected outcomes of the EIA study.
2. Literature review	Various related documents were reviewed to gather information on the potential impacts, the alternatives, how to mitigate the impacts, decommissioning and rehabilitation plan. The literature included maps, publications, and reports on topography, climate, land use, and socio-economic setup of the Village where the project site is located. The literature review helped in undertaking components and areas that would deserve attention during field assessment. The literature review which was mainly based on the desk study method included the following.
3. Information search from internet, journals, books and stakeholders	The application of the National Building Regulations.
4. Fieldwork for making of detailed studies of the baseline situation.	This included bio-physical environment and socio-economic conditions.
5. Analysis of the potential environmental impacts.	This included impact prediction and significance assessment. The three major environmental compartments which are land, air and water were chosen to be observed and discussed in details. These compartments had been chosen because they are the main receiving environmental compartments that should be considered before implementing the project.
6. Public participation	The petroleum industry Part 2: Electrical installations in the distribution and marketing sector. A wide range of key stakeholders were invited to participate and express their views through various media communication. The consultations were done mainly to get a view of the affected parties as well as how they think the project should be carried out for minimum impacts on health, environment and the well-being of the people. Issues which were highlighted by stakeholders were incorporated into the EIA process, the project design and the proponents have committed the same during project implementation.
7. Field surveys	Field surveys were carried out to verify some facts obtained from the literature review. A more informed assessment was however the main objective of the field studies. This was done to confirm the condition of the area in terms of climate, soils, land use, topography and socio-economic set up of the area. It also involved surveys to identify the different environmental components and their state to determine the most likely impacts.
8. Preparation of an environmental management plan for the project and finally and Compilation of the EIA report.	The completion of the various tasks assigned to the team members during the EIA study gave rise to separate individual reports. The reports were collated to come up with a complete environmental impact assessment report.

2.4 Phases of the Project

The EIA study will specifically look at the activities in the following phases: Planning and Design, Construction, Operational, and Decommissioning phases of the project.

2.4.1 Planning and Design Phase

This phase entails the planning, designing and documenting the project. It offers an ideal opportunity to consider and incorporate proactive environmental management measures with the goal of attaining sustainable development. While there is still the chance of accidental impacts taking place; however, through the incorporation of contingency plans (e.g. as proposed in the EMP) during the planning phase, the necessary corrective action can be taken to further limit potential impacts.

2.4.2 Construction phase

This phase entails the actual development of the project infrastructure. The activities during this phase include:

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

The bulk of the impacts during this phase will have immediate effects (e.g. noise, dust and water pollution). If the site is monitored on a continual basis during the construction phase, it is possible to identify and mitigate these impacts as they occur.

2.4.3 Operational phase

The operational phase entails the operation of the project for the intended purpose. The activities during this phase include:

- Decanting fuel to the underground storage tanks from street tankers
- Fuel dispensing into vehicles and approved containers
- Operations of the kitchen and onsite shops
- Site clean-up and housekeeping

Similar to the construction phase, the bulk of impacts during this phase will be the additional traffic generated by vehicles have (e.g. noise, dust and light pollution). If the site is monitored on a continual basis during the construction phase, it is possible to identify these impacts as they occur. These impacts can then be mitigated through the contingency plans identified in the planning phase, together with a commitment to sound environmental management.

2.4.4 Decommissioning phase

- Demolition and removal of physical structure for further land use.
- Site rehabilitation and clean-up.

3 SITE-BASELINE ASSESSMENT

3.1 Geography

3.1.1 Regional context

Otjimbingwe is situated in the west-central part of Namibia in the Erongo Region. Geologically, the settlement falls within the Damara Orogen that dominates the structural basement of most central part of Namibia (Fig.4).

On the Western part of the region is the Atlantic Ocean with Ugab River in the North and Kuiseb River as the southern boundary (Ministry of Mines and Energy (MME), 2010). The Namib Desert borders the Namibian coastline with the Atlantic Ocean and stretching inwards to about 120-150 km.

In terms of regional disctricts, Otjimbingwe falls within the Karibib District. The town of Karibib is approximately 60.6 km northwest of being the nearest major town (Figure 6). Swakopmund, the regional centre of the Erongo Region is situated 236 km west along the B2 road. Namibia's capital city, Windhoek, is located east, approximately 195 km via the B2 and B1 Roads.

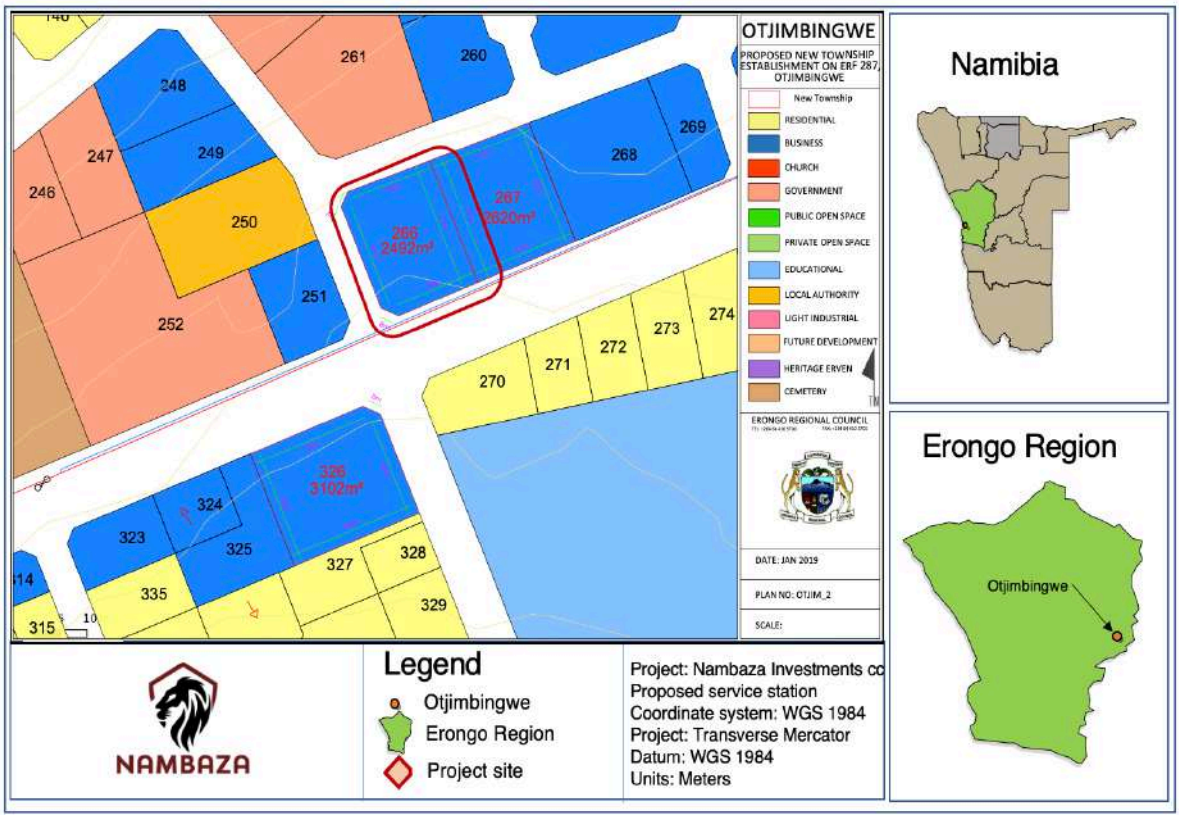

Figure 4: Site location ERF 266 (*Source: Erongo Regional Council, 2022)*

3.1.2 Site Location

The project site is located on Erf 266, along the main street of Otjimbingwe (D1967 national arterial highway). The GPS coordinates for the site are as follow: 22°21'28.8"S, 016° 07'40.8"E (see Figure 5).

Figure 5: Site location (source: QGIS, 2022)

3.1.3 Supporting Infrastructure and Services

The site is currently vacant – and in terms of topography is generally flat and sandy with no rock outcrops. The site is accessible from the D1967 highway and the adjoining roadway. The site is fully serviced with connections for telecommunications, electricity and sewerage are all available. The project plan is to develop aesthetic structures around the environment. Otjimbingwe is also serviced by a number of internal local network of historical and prospecting roads (Figure 7).

3.1.4 Surrounding Land Use

The site measures 2492m^2 in area and lies in a north-south orientation (Figure 6). It is zoned for general business and is located along the main road of Otjimbingwe (Figure 4). The site is adjacent the village council office, a vacant erf of similar size to (open land) to the south, a roadway to the west, a roadway to the north, and a roadway to the east (Figure 6).

Figure 6: Satellite image of site (source: Google earth)

Currently, some portions of Erf 266 are occupied by local street hawkers, but the bigger portion of the erf is open. The site is surrounded by a vacant erf of similar size to the south, a roadway to the west, a roadway to the north, and a roadway to the east. The surrounding areas are general business however, there is an institutional zoned erf to the east and residential zoned erven to the north.

Figure 7: North view

Figure 8: East view

Figure 9: South view

Figure 10: West view

3.2 Topography

The topography of Otjimbingwe falls within the foothills of the escarpment, more specifically within the Otjipatera Mountain Range which has a highest point of 1,989 mamsl (Miller, 1992). The elevation above sea level ranges is approximately 1,250 m. The drainage of the area is dendritic in nature with ephemeral streams, often steeply incised, forming small early stage tributaries into the Swakop River which one of the major ephemeral rivers of western Namibia. The oldest rocks within the Central Zone are the pre-Damaran basement that consists of gneiss and granite lithologies found in different parts of the zone (ibid). The area is characterized by relatively flat topography, with the exception of local ridges and hills where more competent rocks occur, forming conspicuous topographic elevated surface expressions (Fig.6). The elevation above mean sea level (amsl) is at an average elevation of 1,300m for the site.

Figure 11: Satelite Image for Otjimbingwe (source: www.maphil.com, 2022)

3.3 Water Supply

3.3.1 Hydrology

Ephemeral rivers in Erongo region run from their inland catchment to seawards direction (Miller, 1992). Otjimbingwe lies in the Swakop River catchment - with its main tributary the Khan River, the Omaruru River, Kuiseb and Ugab River. Southwards flowing ephemeral tributaries of the Swakop River, namely the Audawib and the Omusema, drain the area. The surface flows of the Swakop river is short-lived during the rainy season from November to April. Arid Region Rivers like the Swakop river typically show extreme variability with extended dry periods followed by runoff that is rapidly initiated in response to summer rain. Groundwater recharge occurs during these flow events. The safeguarding of the ephemeral drainage system is therefore important for groundwater recharge. There are no natural permanent surface water bodies in the project area. The only large water body in the area is the Swakoppoort Dam built on the Swakop River and is situated 80 km southeast of the of the site.

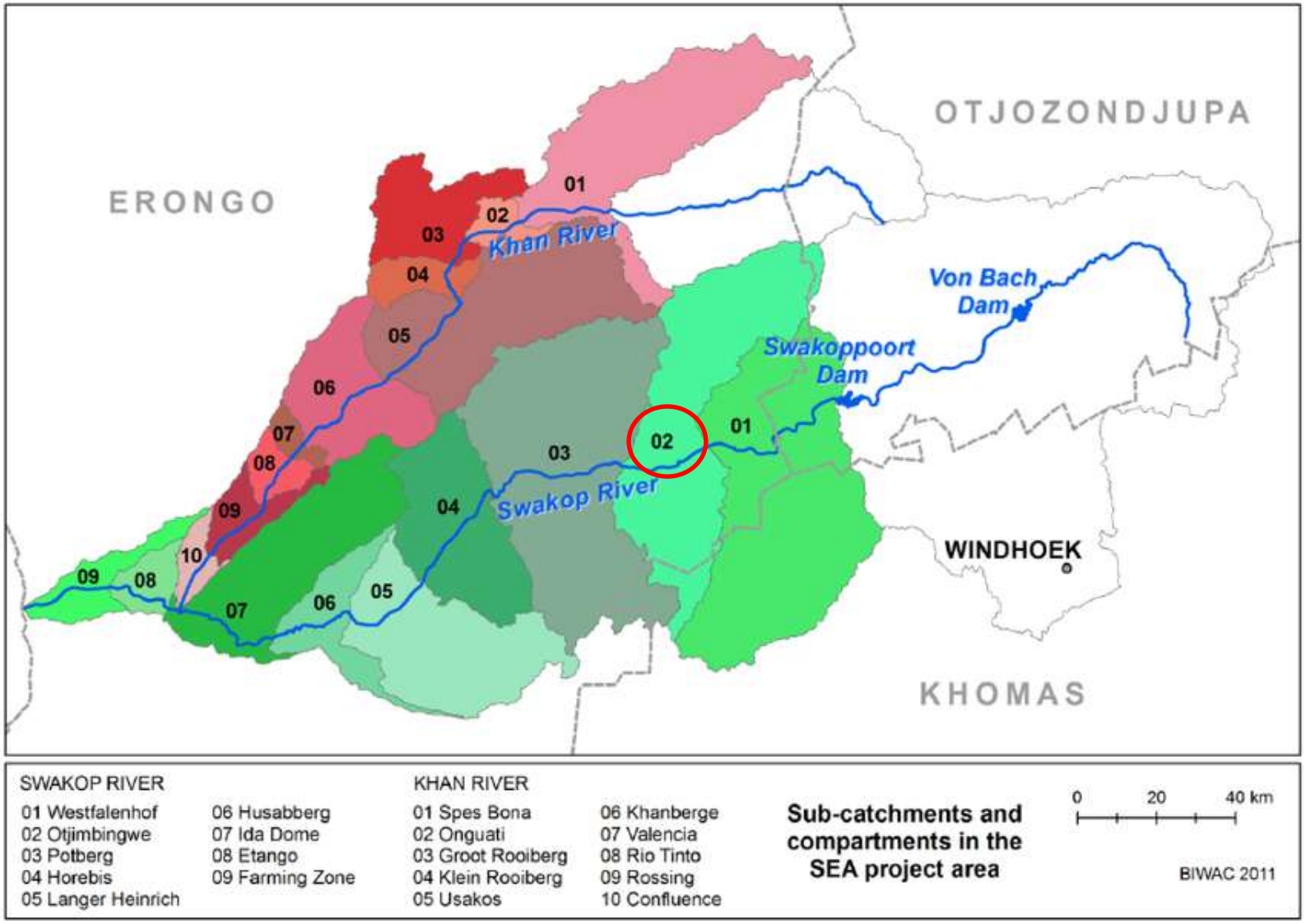

Figure 12: Site location (source: Kuells & Bittner, 2013)

3.3.2 Sources of Water Supply

According to the Department of Water Affairs, (2001), the Erongo Region and in particular the Otjimbingwe area generally has a low groundwater potential. Previous efforts by government to drill boreholes in the Otjimbingwe were thus unsuccessful (Namibian, 2016). Recharge from rainfall is an important parameter determining the groundwater potential, but the degree of metamorphism affects the groundwater potential too (Toth, 2002). The groundwater potential of rocks decreases, as the degree of metamorphism increases. Crystalline rocks, notably the banded dolomitic marble and biotite-quartz which are typical in the Otjimbingwe area, normally exhibit a very low tendency to store water. The groundwater potential of these rock units is generally low, to locally moderate (ibid). Possible targets for water resources in the Otjimbingwe area are mainly fractured zones and faults that outcrop on the surface without impermeable infillings. But the success rate and yields for these rock types are generally low. The area along major ephemeral rivers like Otjimbingwe is consdired promising for surface water due to well-developed fractures and faults that give rise to good recharge potential during the rainy season. Moreso, there is a NamWater pipeline from the Swakoppoort Dam which dams the ephemeral Swakop River in the area which supplies water to Otjimbingwe. Having said that, surface water sources in the area could be vulnerable to pollution sources in case of bridged fuel tanks. To mitigate this impact, it is expected that management of wastewater from the onsite administration blocks and related infrastructures will utilise French Drains and upgraded waste water treatment during the construction and operational phases respectively. Effective monitoring will also need to be put in place to avoid under designing of the facilities that may results in overflow of waste water into the surrounding receiving environment.

3.4 Fauna

3.4.1 Reptiles

The high percentage of endemic reptile species (45.3%) associated with the rocky escarpment region of central western Namibia underscores the importance of this area without formal state protection (Lepidico Karibib Project, 2020). The most important reptile species expected to occur in the general area are:

- Tortoises (Stigmochelys pardalis and Psammobates oculiferus)
- Pythons (P. anchietae and P. natalensis)
- Namibian wolf snake (Lycophidion namibianum)
- Rock monitor (varanus albigularis)
- and the endemic and little-known gecko species – e.g. Pachydactylus species.

Tortoises, snakes and monitor lizards are routinely killed for food or as perceived threats.

3.4.2 Amphibians

There are seven species of amphibians that generally occur in the Otjimbingwe area. Two of the amphibian species found here - the Poyntonophrynus hoeschi and Phrynomantis annectens are classified endemic (Griffin 1998b) and the Pyxicephalus

adspersus species is classified as “near threatened” (Namibia Biodiversity Database, 2000). Notwithstanding this, amphibians are not considered threatened or important in this assessment because there are no open permanent surface water in the area.

3.4.3 Mammals

In total, there are 87 classes of mammal species known and/or expected to occur in the general Otjimbingwe area. Species of greatest concern in the general area are those viewed as “rare” in Namibia – i.e. Namibian wing-gland bat and Southern African hedgehog – and species classified as “near threatened”. The project site is however located in an urban area where the occurrence of these species are generally scarce.

3.4.4 Birds

At least 217 bird species [mainly terrestrial “breeding residents”] occur in the general Otjimbingwe area. The most important bird species from the general area are those classified as endemic to Namibia of which the Damara hornbill and Herero chat are viewed as the most important due to the overall lack of knowledge of these species. The Rüppels korhaan is also found in the area – however it migratory. Other species of concern are those classified as endangered (violet wood-hoopoe, Ludwig’s bustard, whitebacked vulture, black harrier, tawny eagle, booted eagle, martial eagle, black stork), vulnerable (lappetfaced vulture, secretarybird) and near threatened (Rűppel’s parrot, kori bustard, Verreaux’s eagle, peregrine falcon, marabou stork).

3.5 Flora

3.5.1 Trees/Shrubs and Grasses

At least 91 to 101 larger species of trees and shrubs are known to occur in the general Otjimbingwe area of which 8 species (7.9%) are classified as endemics, 4 species as near endemics, and 23 species (22.8%) are protected. The endemic grass – Eragrostis omahekensis – is viewed as the most important species potentially occurring in the general area.

3.5.2 Aloes

Aloes are protected throughout Namibia and potentially occur in the general area. Aloes which are viewed as important are the Aloe asperifolia, Aloe hereroensis and Aloe zebrina (Rothmann 2004).

3.5.3 Other species

Other Flora species with commercial potential that occur in the general Otjimbingwe area include Harpagophytum procumbens (Devil’s claw) – which are harvested for medicinal purposes and often overexploited and Citrullus lande. Another set of species includes the Commiphora and Lithops species which are found throughout Namibia. Lithops species – are all protected and often difficult to observe, especially during the dry season when their aboveground structures wither. The closest species are currently only known to occur west of Usakos – which is roughly 90km away from the site.

3.6 Climate

3.6.1 Weather conditions

Otjimbingwe comprises warm to hot daytime temperatures throughout the year, while the nights are mild to cool in winter. The mean annual rainfall is highly variable and may range between 200 - 300 mm (Fig. 6). The distribution of rainfall is extremely seasonal with almost all the rain falling in summer - from November to April with occasional with mean annual gross evaporation of about 3300 mm (Fig. 6). The local project area has the following three distinct seasonal characteristics:

- A dry and relatively cool season from April to August with average daytime highs of 23°C and virtually no rainfall during this period.
- A hot and dry season from September to December with minimal and variable rainfall falling (50mm per month falling during this period (although this is extremely variable) and average high temperatures of 29°C.
- The prevailing wind in the area seems to be dominated by winds from the north eastern and southwest quadrants.

Locally, the situation may be different dues various influences like topographic effects.

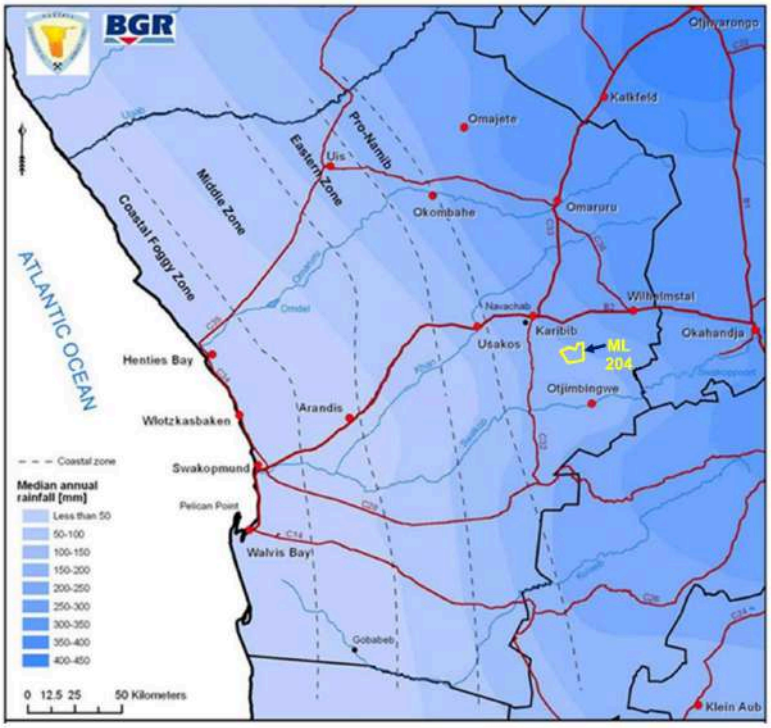

Figure 13: Mean annual rainfall Erongo (Source: MME, 2010).

3.6.2 Wind Patterns

The Erongo Region is heavily influenced by two high pressure systems, namely the sub continental high and the South Atlantic high. The wind patterns are driven by the South Atlantic high-pressure systems, resulting in strong winds prevailing from the south or south-west. The cold Banguela Current on the Namibian coastline subsequently influences the South-westerly winds. The wind experienced in the area and surroundings are mainly north-easterly or east winds. These winds are usually dry

and hot with a wind speed of about 10km/hour. This influence is experience to up to 50 days annually between the months of April to September. Within the project area, stronger winds are dominated by the south-westerly or a north-easterly component. The wind is stronger in winter due to high pressure system of inland regions.

3.7 Socio-Economic Aspects

The location of the project site is central of Otjimbingwe. There is currently no economic activity taking place on the site, however the site is located along a very busy intersection - the main road of Otjimbingwe. The intersection is full of vehicular and pedestrian traffic. Month ends are usually crowded with pedestrians, cars and entertainment activities.

3.7.1 Socio-Economic Realities

The. Otjimbingwe is among the least densely populated area in Erongo Region with a population density of approximately 0.9 persons per km^2. According to unofficial statistics, the population of Otjimbingwe is roughly 5320. A socioeconomic baseline reported in the Lepidico Karibib Project (2020), reports the following key socioeconomic findings:

(i) Household socio-demographic characteristic:

- A considerable size of households (40.6%) in Otjimbingwe are headed by relatively older people (>56 years of age),
- The majority (59.4%) of residents are relatively younger people in the age groups of 18–35 years (accounting for 26.1%) and 36–60 years (33.2%).
- Across target communities, the average size of household is 5.15, and ranges between 3.6 and 6.3 persons – being is higher than the national average.
- Households have more female (19.6%) than male adults.
- Children account for 38.1% (Otjimbingwe), whereas pensioners account for 9.2% of households.

(ii) Education levels:

- A quarter (25%) of household heads in Otjimbingwe did not attend any formal education, and most ended their academic careers at primary school level.
- Attendance of secondary school by unemployed youth shows statistics that are higher than the national average. For example, on average 40.8% and 46.1% of unemployed female youth (UFY) and unemployed male youth (UMY) respectively, reached Grade 10. A further 34.8% and 34% of UFY and UMY respectively, reached Grade 12.
- In light of education and skill levels, the study reveal that the area would have an abundance of low-skilled and unskilled labour – some who can be trained through e.g. on-the-job training and short-courses to assume employment.

(iii) Education levels:

- The study noted that a relatively high number of heads of household in Otjimbingwe (18.9%) had no income. Moreso, majority (63.9%) of other household members did not have incomes.

- Social grants were relied upon as the main income source by 52.8% of the population.
- Reliable farming income was recorded by only 8.3% in Otjimbingwe.
- Nearly all (93.3%) of the sampled households had a combined monthly income in the range of NAD 1 to 2,999.
- Majority households and key informants are unsatisfied with municipal services due to a magnitude of reasons.
- At present, the village councils do not have the financial resources or the professional and administrative capabilities to fulfil their mandate as perceived by communities.
- In Otjimbingwe, the main water source is a public tap, and only 11.1% had water piped into their dwellings.

(iv) Noise levels:

The observable noise levels at the site are high during the day and lower at night due to the amount of traffic utilising the main roads. These noise levels are not a nuisance to residents given that most people are at work during the day when noise levels are high and at home in the evening when noise levels are low. During the night most shops and offices are closed except for the bars which close late at night.

3.7.2 Development levels:

The development of a service station is a viable option for the site location, as it will bring much needed development to the area. The condition of some properties in the local area are showing some decline, and accordingly a new development will bring much needed newness. In terms of the service offering by the project, the retail sector particularly is a very important part of urban spaces, and is the last step in the industrial chain of offering products and services to the customer. Retail also is much more important than just the shopping facility: Spatial qualities such as liveability and access by different income classes play a significant role when retail is presented within reach. Other important factors of town liveability are accessibility to health facilities such as doctors and pharmacies. The absence of these in communities have led to some authors to argue for transport injustices or social exclusion in economic development (Netter, 2013).

3.8 Baseline Assessment Conclusions

As all developments have potential negative environmental consequences, identifying the most important faunal species including high risk habitats beforehand, coupled with environmentally acceptable mitigating factors, lessens the overall impact of such development. The proposed development is anticipated to have no impact on fauna and flaura. Although general disturbances could affect bird species of concern are also mobile and not limited to the area. Protected flora species are not associated with the development sites. In terms of socio-economic impacts, it is expected that the development will have overall positive impact on Otjimbingwe.

4 IMPACT IDENTIFICATION AND ASSESSMENT

A key part of the EIA Scoping Process is the preliminary identification and consideration of issues and concerns that may impact (positively and/or negatively) the biophysical and socio-economic environments at different stages of the development. Issues identified as potentially significant during the Scoping Phase form the basis on which further studies were conducted.

4.1 Construction Phase

During the construction phase it is expected that, the main sources of impact generally result from the use of heavy-duty vehicles during construction. There are predicted impacts, however these cannot be quantified, primarily due to the lack of detailed information related to scheduling and positioning of construction related activities, which will only come out in the feasibility study. Instead, in this analysis, a qualitative description of the impacts is done which involves the identification of possible sources of emissions and the provision of details related to their impacts. The primary HSES impacts from the construction of service stations include air and noise quality impacts.

4.1.1 Air Quality impacts

The construction of a service station generally consists of a series of different operations, each which has a different duration and potential to impact air quality. The major impactor of air quality during the construction phase is dust emission. Dust emission will vary from day to day depending on the phase of construction, the level of activity, and the prevailing meteorological conditions. Dust will be generated significantly due to the dry conditions and the sandy texture of the soils in the project area. The following possible sources of dust generation have been identified as activities, which could potentially generate dust during construction operations:

- Transportation of materials
- Scraping;
- Debris handling;
- Land clearing for infrastructure

To avoid the generation of unnecessary dust, material storage piles should be protected from wind erosion. This can take the form of windbreaks, water sprays or vegetation of piles. All stockpiles should be damped down, especially during dry weather.

4.1.2 Noise Quality impacts

The major part of service station construction usually takes place with heavy duty earth moving machinery such as bulldozers and heavy industrial activity such as welding etc. Excessive noise is generated during this process, which often can lead to disgruntled community members. Noise can also be generated during the transportation of the construction material, usually by truck, to and from the site. Noise impacts from the construction phase can be mitigated by restricting heavy duty work to hours of daylight.

4.2 Operational Phase

4.2.1 Soil and Groundwater Pollution

Groundwater and soil pollution from hydrocarbon products are risks associated with the storage and handling of petroleum products (hydrocarbons). When a release of hydrocarbon products takes place into the soil, infiltrates the soil in the form of Light Non-Aqueous Phase Liquids (LNAPL). When this happens LNAPL start to migrate vertically downwards. The shallow ground zone between the land surface and the top of the ground water table where fuel tanks are installed is called the vadose zone.

If LNAPL are released into the vadose zone they could flow through the central portion of the soil pores until residual saturation is reached. If this happens, a three-phase system consisting of water, LNAPL, and air is formed. Infiltrating water dissolves the components within the LNAPL and transports them to the water table. These dissolved contaminants form a contaminated plume radiating from the area of the residual product. As these vapours diffuse into adjoining soil areas, they may partition back into the water phase and transfer contamination over wider areas. If the soil surface is relatively impermeable, vapours will not diffuse across the surface boundary and concentrations of contaminants in the soil atmosphere may build up to equilibrium conditions. Dissolved components of the LNAPL may also precede the less soluble components and may change the wetting properties of the water, causing a reduction in the residual water content and a decrease in the height of the capillary fringe.

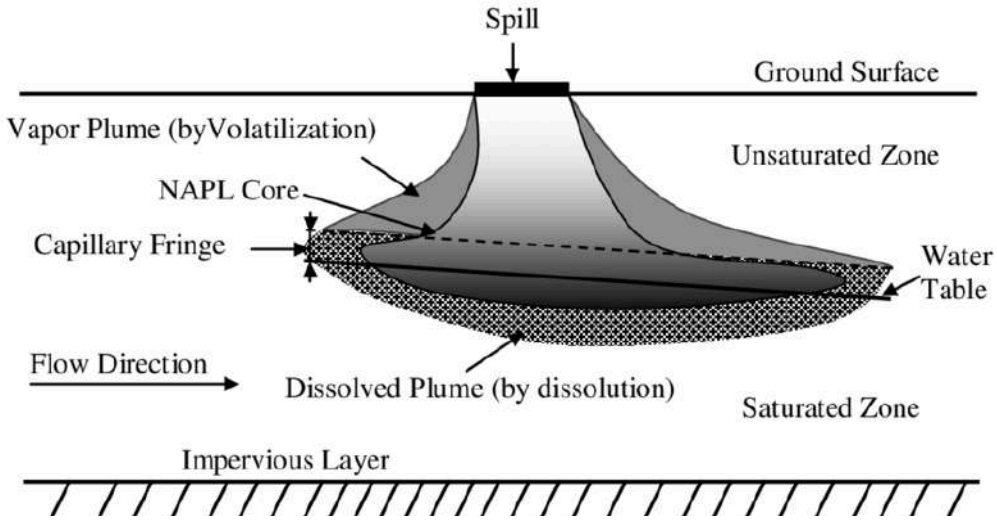

Figure 14. Conceptual LNAPL Release to the Vadose Zone from service stations

To mitigate the potential impact of the release of LNAPL into the atmosphere, the ground level surfaces of the project site must be covered with an impermeable material. This will reduce the diffusion of vapours into the atmosphere. Where the water table is high, cathodic protection should be used for single steel walled tanks. Otherwise, secondary contained tanks, i.e., a double-walled steel tank, double walled fiberglass or jacketed steel tanks (with high density polythene or fiberglass outer wall) should be used. Suitable sand shall be used for both bedding and backfilling of steel tanks. Installed tank and pipe work shall be hydrostatically tested.

4.2.2 Health, Safety, Environmental and Socio-Economic (HSES) Impacts

The operation of service station will involve the commercial transactions of hydrocarbon fuels (petrol, diesel, liquid, petroleum, gas or paraffin). The Health, Safety, Environment and Socio-economic impacts assessment must take into consideration the relationship between the operational activities and the social life due to these transactions. This relationship is interlinked dependence of social and economic activities. As Table 4 below shows below, we have classified the potential impacts into health impacts, safety impacts, environmental impacts, and socioeconomic impacts.

Table 4: HSES impacts from Operating service stations

HSES Impact	Brief description
Health Impact	
Noise Impacts	Some noise will exist due to heavy and light motor vehicles accessing the site for delivering and collecting fuel during operations.
Air Quality	Hydrocarbon vapours containing volatile organic compounds, which harm human health and contribute to ozone pollution. Running motor vehicles produce carbon monoxide and particulate matter.
Manual handling	Hydrocarbons are carcinogenic and dermal contact and inhalation of fumes should be prevented.
Safety Impacts	
Slips, trips and falls	Fuel, oil spills and water on the forecourt can put workers and others at risk of slip, trip or fall injuries.
Fire and explosion	Unleaded petrol is extremely flammable and if fuel is not handled according to Material Safety Data Sheet instructions and SANS requirements, a fire risk exist during the operational phase.
Compressed Air System	Compressed air is extremely forceful. It can dislodge particles and these are a danger since they can enter your eyes or abrade the skin.
Violence to staff	There are many causes of violent behaviour with customers. Some may be easy to identify, such as frustration, anger, misunderstanding, stress, communication problems, conflict with authority and theft/robbery.
Environmental Impacts	
Solid and Liquid Waste Generation	Integral containers of adequate design and capacity should be provided for solid waste, such as discarded cans, bottles, etc. Proper facilities for storage and disposal of used and waste oil and gas must also be provided. Waste water from the washing of motor vehicles and sewage must also be disposed of satisfactorily.
Groundwater, Surface Water and Soil Contamination	Operations entail the storage and handling of various hydrocarbons which present a contamination risk. Contamination may either result from failing storage facilities, spills and leaks associated with fuel handling. Such material may contaminate surface water, soil and groundwater. Modern retail facilities are well designed to reduce leakages and spillages from contaminating soil and water.
Pollution from chemicals and materials used in shops for retail and cleaning.	Operations entail the use, storage and handling of various chemicals, which present a contamination risk. Contamination may either result from failing storage facilities, spills and leaks associated with these chemicals. Such material may contaminate surface water and soil and may be harmful when they come in contact or inhaled with humans.
Traffic Impacts	Some traffic impacts can be experienced in the vicinity of the facility especially where vehicles gains access from and to the facility.
Socio-economic	
Economic benefits	Operations of the facility provide employment opportunities to residents. The operational phase creates permanent employment opportunities and some training and skills development takes place.
Increased land value and real estate	The addition of the service station will potentially improve the adjacent land value and bring much needed development to the area.

4.3 Decommissioning Phase

The decommissioning phase is associated with activities related to the demolition of infrastructure and the rehabilitation of disturbed areas. The process typically proceeds as follow:

- the first stage of decommissioning involves demolishing the forecourt buildings and canopy.
- Secondly, the tanks and their associated pipe work are removed.
- Lastly, the site is checked for contamination before being backfilled and restored to a level surface.

The total rehabilitation should ensure that the total area will be a free draining covered with topsoil and grassed. Additionally, the following activities must be considered:

- Remaining exposed excavated areas filled and levelled using overburden recovered from stockpiles.
- Stockpiles and tailings impoundments to be smoothed and contoured.
- Topsoil replaced using topsoil recovered from stockpiles; and
- Land and permanent waste piles prepared for revegetation.

Possible sources of fugitive dust emission during the closure and post-closure phase include the following:

- Movements of stockpiles by bull dozers and grading of the site.
- Transport and disposal of overburden for filling.
- Infrastructure demolition and infrastructure rubble piles.
- Transport and disposal of infrastructure rubble.
- Transport and reuse of topsoil.

A note to remember during decommissioning is that exposed soil is often prone to erosion by water. The erodibility of soil depends on the amount of rainfall and its intensity, soil type and structure, slope of the terrain and the amount of vegetation cover (Brady, 1974). Revegetation of exposed areas for long-term dust and water erosion control is commonly used and as the most cost-effective option.

4.4 Impact Assessment

The impact assessment exercise allows the assignment of relative significance to predict HSES impacts associated with the project, and to determine the manner in which impacts are to be avoided, mitigated or managed. This study employs the Rapid Impact Assessment (RAM) Method (Pastakia, 1998). The RAM method was considered suitable for the project because the hazards and impacts appeared magnified from the onset. The RAM is also considered more organized and have the ability to integrate both qualitative and quantitative aspects of an assessment (Chambers, 1985). The HSES impacts expected from the construction, operational and decommissioning of the service station are accordingly classified in Table 6 as follows: Impacts are assessed according to the categories as Tabled in Table 5 and Ranking formulas are subsequently calculated as per Environmental Classification method = A1 x A2 x (B1 + B2+ B3).

Table 5: HSES Impact Assessment Criteria

Criteria	Score
Importance of condition (A1) – assessed against the spatial boundaries of human interest it will affect	
Importance to national/international interest	4
Important to regional/national interest	3
Important to areas immediately outside the local condition	2
Important only to the local condition	1
No importance	0
Magnitude of change/effect (A2) – measure of scale in terms of benefit / disbenefit of an impact or condition	
Major positive benefit	3
Significant improvement in status quo	2
Improvement in status quo	1
No change in status quo	0
Negative change in status quo	-1
Significant negative disbenefit or change	-2
Major disbenefit or change	-3
Permanence (B1) – defines whether the condition is permanent or temporary	
No change/Not applicable	1
Temporary	2
Permanent	3
Reversibility (B2) – defines whether the condition can be changed and is a measure of the control over the condition	
No change/Not applicable	1
Reversible	2
Irreversible	3
Cumulative (B3) – reflects whether the effect will be a single direct impact or will include cumulative impacts over time, or synergistic effect with other conditions. It is a means of judging the sustainability of the condition – not to be confused with the permanence criterion.	
Light or No Cumulative Character/Not applicable	1
Moderate Cumulative Character	2
Strong Cumulative Character	3

Table 6: HSES Environmental Classification

Environmental Classification	Class Value	Description of Class
72 to 108	5	Extremely positive impact
36 to 71	4	Significantly positive impact
19 to 35	3	Moderately positive impact
10 to 18	2	Less positive impact
1 to 9	1	Reduced positive impact
0	0	No alteration
-1 to -9	-1	Reduced negative impact
-10 to -18	-2	Less negative impact
-19 to -35	-3	Moderately negative impact
-36 to -71	-4	Significantly negative impact
-72 to -108	-5	Extremely Negative Impact

Table 7: HSES Impact Assessment

Impact	Project Activity /Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Visual Impact	Construction	Aesthetic appearance and integrity of the site	0	-1	2	2	2	-6	0	Probable
	Operations	Aesthetic appearance and integrity of the site	3	3	2	2	2	24	+3	Probable
	Indirect Impacts	Perceived economic development	2	2	2	2	2	24	+3	Probable
Economic benefits	Construction	Employment and contribution to local economy	2	2	3	2	2	28	+3	Definite
	Operations	Employment and contribution to local economy	3	3	3	3	2	72	+5	Definite
	Indirect Impacts	Decrease in unemployment, contribution to local economy	3	3	3	3	3	81	+5	Definite
Skills development	Construction	Employment, technological development and transfer of skills	2	2	3	2	2	28	+3	Probable
	Operations	Employment, technological development and transfer of skills	3	3	3	3	2	72	+5	Definite
	Indirect Impacts	Transfer of skills and technological development	3	3	3	3	3	81	+5	Definite
Traffic	Construction	Delivery of equipment and building supplies	1	1	2	2	2	6	1	Probable
	Operations	Increase traffic, road wear and tear and accidents	1	-1	2	2	2	-6	-1	Probable
	Indirect Impacts	Increased economic activity due to traffic	2	2	3	2	2	28	+3	Definite
Health and Safety	Construction	Slips, trips and falls	2	1	2	3	1	12	-1	Probable
	Operations	Slips, trips and falls	2	1	2	3	2	14	-1	Definite
	Indirect Impacts	Slips, trips and falls	2	1	2	3	3	16	-1	Definite
Manual Handling	Construction	Chronic ills related to contact with hydrocarbon	2	-1	1	1	2	-8	-1	Improbable
	Operations	Chronic ills related to contact with hydrocarbon	2	-1	1	2	2	-10	-1	Improbable
	Indirect Impacts	Chronic ills related to contact with hydrocarbon	2	-1	2	2	2	-12	-1	Improbable
Violence to staff	Construction	Frustration, misunderstanding, theft/robbery.	2	-1	1	1	2	-8	-1	Probable
	Operations	Frustration, misunderstanding, theft/robbery.	2	-1	1	2	2	-10	-1	Probable
	Indirect Impacts	Frustration, misunderstanding, theft/robbery.	2	-1	2	2	2	-12	-1	Probable

Compressed Air systems	Construction	Small particles dislodged by compressed air	1	-1	2	2	2	-6	0	Probable
	Operations	Small particles dislodged by compressed air	1	-1	2	2	2	-6	-1	Probable
	Indirect Impacts	Damage or injury	1	-1	2	2	2	-6	-1	Improbable
Air Quality	Construction	Excessive dust generated from maintenance and upgrade activities	1	-1	2	2	2	-6	-1	Probable
	Operations	Fuel vapors, exhaust fumes from cars	1	-1	2	2	2	-6	-1	Probable
	Indirect Impacts	Air pollution from fuel vapors and exhaust fumes	1	-1	2	2	2	-6	-1	Improbable
Noise	Construction	Excessive noise generated from construction activities – nuisance and hearing loss	1	-1	2	2	1	-5	-1	Probable
	Operations	Noise generated from the operational activities – nuisance	1	0	2	2	2	0	0	Improbable
	Indirect Impacts	Noise pollution from operational activities	1	0	2	2	2	0	0	Probable
Waste production	Construction	Excessive waste production, littering, illegal dumping, contaminated materials	1	-1	2	2	2	-6	-1	Definite
	Operations	Excessive waste production, littering, contaminated materials	2	1	2	2	2	12	+2	Definite
	Indirect Impacts	Reduced cleanliness of Environment	2	2	2	2	2	12	+2	Probable
Ecosystem and Biodiversity Impact	Construction	Impact on fauna and flora. Loss of biodiversity	1	1	3	2	2	7	0	Improbable
	Operations	Impact on fauna and flora. Loss of biodiversity	1	1	3	2	2	7	+1	Improbable
	Indirect Impacts	Ecosystem change	1	-1	3	2	2	-7	+1	Improbable
Groundwater, Surface Water and Soil Contamination	Construction	Contamination from hazardous material spillages and hydrocarbon leakages	1	-1	2	2	1	-6	-1	Probable
	Operations	Contamination from hazardous material spillages and hydrocarbon leakages	2	-1	2	2	1	-10	-2	Probable
	Indirect Impacts	LANPL release into the vadose zone	2	-1	2	2	1	-10	-2	Improbable
Fire and explosion	Construction	Fire and explosion risk	1	-2	2	2	1	-10	-2	Probable
	Operations	Fire and explosion risk	1	-1	2	2	1	-5	-1	Probable
	Indirect Impacts	Fire and explosion risk	1	-1	2	2	1	-5	-1	Probable

Color coding for impact type	Health & Safety	Socio-Economic	Localized Long-term	Environmental

4.5 Discussion

From the impact assessment conducted, we deduce that the proposed development of Otjimbingwe Service Station is suitable for the site assessed. The environmental classification of impacts for the development and operation of the service station is provided in Table 7. The probability ranking refers to the probability that a specific impact will happen following a risk event. These can be improbable (low likelihood); probable (distinct possibility); highly probable (most likely); and definite (impact will occur regardless of prevention measures). The results yields a net class value of +15 obtained from the RAM Method, which means a residual positive impact of the development. In this regard, we note that none of the adverse impacts that were identified can be regarded as impacts that cannot be mitigated to acceptable levels. For this reason, the no-go option was also discounted and thus omitted from discussion in this chapter. (That said however, we still consider the no-go option in the public participation process discussed in the next chapter).

A summary of the main SHES impacts may be summarised as follow:

- The proposed development will have a significant positive impact on the socio-economic environment of Otjimbingwe; including: improved visual impacts, economic benefits, skills development and indirect economic impacts from additional traffic.
- If measured over the long term it is expected that the development will outweigh the negative socioeconomic aspects.
- The biophysical environment will mostly be affected by construction activities that could result in excessive noise and dust, however during operation, these impacts would be minimal.
- The geotechnical and geo-hydrological aspects of the study area are regarded as the most sensitive. However the soils of the study have low permeability and this reduces the risk.
- In terms of safety and health, most impacts are associated with operations and employee safety. These impacts are however not major and can be mitigated with a good safety management system during operations.
- The proposed development will have a positive impact on the economy due to temporary and permanent employment opportunities.
- Finally, the project will also have a positive impact on the social environment as there will be visible investment from the private sector within this undeveloped area.

Notwithstanding the discussion above, the development should now be planned, constructed and operated in strict accordance with the mitigation measures and an Environmental Management Plan (EMP) which must adhere to any and all requirement of any authorizations issued for the proposed development. The EMP is developed in Chapter 6.

5. STAKEHOLDER ENGAGEMENT PROCESS

5.1 Overview

Public consultation and engagement process have been part of the environmental assessment process for this project. This was done in line with the provisions of the Environmental Assessment (EA) process in Namibia which is governed by the Environmental Impact Assessment Regulations No. 30 of 2012 gazetted under the Environmental Management Act, 2007, (Act No. 7 of 2007) as well as in compliance with Good International Industry Practice (GIIP).

5.2 Purpose of the Public Participation Process

The main purpose of public participation in the EIA process is to ensure that issues are identified early during the process before major decisions are made. Moreover, public participation provides a platform for the following to happen:

- Provide information to Interested and Affected Parties (IAPs) and other stakeholders about the project background, proposed site, project concept and predicted potential impacts.
- Establish the public's interests, concerns and expectations regarding the proposed project.
- Obtain input from IAPs, the public and other key stakeholders.
- Assist the IAPs to:
    - Verify that their issues have been captured,
    - Verify that issues have been considered by the technical study; and
    - Comment on the findings of the Basic Assessment Report.

5.3 Identification of Key Stakeholders

According to the national EIA Regulations, IFC (2007) and the Equator Principles (www.equatorprinciples.com), a stakeholder is a persons or group/s who are directly or indirectly affected by a project, as well as those who may have interests in a project and/or the ability to influence its outcome, either positively or negatively.

Based on past experiences and in line with new Environmental Regulations, below are some specific questions which Risk-Based Solutions (RBS) uses to ensure that no important stakeholder is forgotten:

- Who is directly responsible for the decisions on the issues?
- Who is influential in the area, community and/or organisation?
- Who will be affected by any decisions on the issue?

The following key stakeholders were accordingly identified for consultation purposes:

- Ministry of Mines & Energy: Mr Andreas Sheehama
- Ministry of Environment and Tourism (DEA): Dr. F.M. Sikabongo
- Otjimbingwe Village Council: Ms. Ingrid Naruses
- Erongo Regional Council: Ms. S Kauari
- Otjimbingwe community members
- Government offices in proximity

5.4 Environmental Scoping Process

A Background Information Document (BID) for the project was promulgated to the enumerated stakeholders (see section 6.2). The BID contained the relevant information about the proposed project and promoted stakeholders and public participation in the scoping process. A comment sheet was provided at the end of the BID report inviting comments on issues of interest and importance to the stakeholders. Subsequently, site notices were erected, and information posters were placed at strategic locations including: Erongo Regional Council, Otjimbingwe Village Council and on the site. The scoping process was further initiated by publicizing it through the Namib Times (27 January & 10 February 2023) and Confidante newspapers (27 January & 09 February 2023). Copies of the adverts are attached in Annex 3.

The publications announced the beginning of the scoping process and invited stakeholders and members of the public to register as IAPs so as to participate in the EIA for the construction of the service station. IAPs were to register with the Environmental Consultant and to submit their concerns or inputs at j88antonius@gmail.com. Additionally, they were informed of a public participation meeting on the 18 February 2023.

Fig.15 Otjimbingwe Village council

Fig.16 Otjimbingwe Government office

Fig.17 Erongo Regional Council

Fig.18 On Site

5.5 Public Consultation

The procedure followed in the site meeting was in line with the Environmental Management Act (EMA No 7 of 2007) and the Environmental Impact Assessment Regulations of 2012 as follows.

The meeting started with a project background, project concept and predicted potential impacts. Translation services were employed for local languages. The public's interests were then established, and this was followed by a session for concerns and expectations regarding the proposed project. These recommendations were considered, and these issues were also incorporated in Chapters 4, 5 and 7 of this document.

Fig.19 Stakeholder engagement meeting

Fig.20 Stakeholder engagement with translator

The site meeting was well attended by the local community. The following comments were registered:

- Residents want preference in terms of jobs.
- Residents want preference in terms of construction contracts.
- Proponent must consider Otjimbingwe's high water pressure problem for fire safety.

The proponent was informed and requested to consider these comments. The proponent (Nambaza Investments cc) respondent to the comments as follow:

- Vacancies will be advertised at the village council for locals to apply.
- The construction project is handled by the fuel major who has stringent requirements; however opportunities will be advertised.
- A fire hydrant with a booster pump will be installed on site. This mitigates the potential impacts of any explosions. Additional measures are provided for in the EMP for all the phases of the project.

5.6 Review of Draft Environmental Scoping and Management Plan Report

The draft report was compiled and shared with the Otjimbingwe Village Council on the 20th of February 2023. The same was also posted at the Ministry of Mines and Energy Resource Centre for public review and commenting for a minimum period of 1 week. A detailed EIA report was also obtainable from j88antonius@gmail.com.

5.7 Public Participation: Way Forward

No comments were received on the BID or intention to build the service station. The draft report was thus adopted as the final report before submission to the Competent Authority: MME and the decision regarding the EIA report was published.

5.8 No-Go option

The 'no-go' option is sometimes referred to as the baseline alternative, 'no-action' alternative or even the 'zero-alternative' (Glasson et al., 1999). It assumes that the activity does not go ahead, thus implying a continuation of the current situation or the status quo. In a situation where negative environmental impacts have high significance, the 'no go' option takes on particular importance (World Bank, 1996). Therefore, the 'no-go' option, as well as all other relevant alternatives must be described, assessed and evaluated at the same scale and level of detail that enables adequate comparison with the proposed project.

In our case, the "no-go" option means maintaining the status quo were no service station will be constructed. This would be the best for the environment given that it remains untouched, however, the public participation meeting revealed that the 'no go option' is not ideal as it means no development. Moreover, the description of the baseline environment in Section 4 which focussed on the key characteristics of the environment, and values or importance attached to the environment revealed that the project will result in a positive socio-economic contribution through job creation and will provide much needed services and spin off industries in the immediate vicinity.

6. ENVIRONMENTAL MANAGEMENT PLAN

This section outlines the Environmental Management Plan (EMP) wherein the HSES impact mitigation measures are proposed and considered. The EMP is structured so as to provide its various intended recipients (Developer, ER, consulting engineers and contractors) with mitigation measures immediately applicable to their respective scopes of work. The management requirements for the various recipients carrying out work for this project are divided according to the main project phases.

6.1 Planning and Design: Service Station

During the phases of planning for future operations, construction and decommissioning of the facility, it is the responsibility of proponent to ensure they are and remain compliant with all legal requirements. The proponent must also ensure that all required management measures are in place prior to and during all phases, to ensure potential impacts and risks are minimized. The following actions are recommended for the planning phase and should continue during various other phases of the project:

- Ensure that all necessary permits from the various ministries, local authorities and any other bodies that governs the construction (maintenance) activities and operations of the project remains valid.
- Ensure all appointed contractors and employees enter into an agreement, which includes the EMP.
- Ensure contractors, subcontractors, employees and all personnel understand the contents of the EMP.
- Make provisions to have a Health, Safety and Environmental Coordinator to implement the EMP and oversee occupational health and safety as well as general environmental related compliance at the site.
- Furthermore, have the following emergency plans, equipment and personnel on site where reasonable to deal with all potential emergencies:
    - Risk management / mitigation / EMP/ Emergency Response Plan and HSE Manuals
    - Adequate protection and indemnity insurance cover for incidents;
    - Comply with the provisions of all relevant safety standards; Procedures, equipment and materials required for emergencies.
    - If one has not already been established, establish and maintain a fund for future ecological restoration of the project site should project activities cease and the site is decommissioned, and environmental restoration or pollution remediation is required.
- Establish maintain a reporting system to report on aspects of construction activities, operations and decommissioning as outlined in the EMP.
- Keep monitoring reports on file for submission with environmental clearance certificate renewal applications where needed.
- Appoint a specialist environmental consultant to update the EA and EMP and apply for renewal of the environmental clearance certificate prior to expiry.

6.2 HSES Impact mitigation strategies

The following general mitigation strategies are recommended for the planning and design phase to reduce identified HSES impacts:

- Design boundary fencing in such a way that small burrowing and domestic animals do not enter the project site.
- Buildings must be designed such as to minimise the transmission of noise from the inside to the outdoors. In doing so, ensure that the facility is designed to take into account the maximum allowable equivalent continuous day and night rating levels of the potentially impacted sites outside the project boundary.
- 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.
- Ensure landscaping designs prohibits the planting of potentially alien invasive plant species (e.g. Tecoma stans, Pennisetum setaceum, etc.) for decorative purposes and incorporates indigenous vegetation that is adapted to local weather conditions.

6.3 Strategies to optimize Socio-Economic Benefits

The following mitigation measures are recommended for the planning and design phase to reduce the impact on the socio-economic aspects.

- The contractor should be required to employ locally where possible. The requirements for employing local people should be formalised within the contractor's contract. Should a position be offered to non-local person the contractor should be able to prove that no local person qualifies for such a position, through advertising.
- A provision stating that all unskilled labour should be sourced from local communities should be included within tenders concerning the construction and/or maintenance of services infrastructure.
- Provisions promoting gender equality pertaining to recruitment should be included within tender documents concerning the construction and/or maintenance of services infrastructure.
- Women should be given preference for certain unskilled jobs (e.g. flag bearers).
- It is crucial that the project procurement criteria include requirements for training and skills development of the contractor's workforce by the contractor. The training should be able to capacitate the employees to apply for permanent positions during the operations of the solar power facilities.
- The proponent must follow up to ensure that the contractor is indeed following the guidelines as prescribed in this EMP.

6.4 Responsibilities

The responsibility for the implementation of the EMP ultimately lies with the proponent, who is also responsible for the eventual operation of these developments. The implementation of the EMP requires the involvement of several key individuals

appointed by the proponent, each fulfilling a different but vital role to ensure sound environmental management during each phase of these developments. The following positions and their respective responsibilities are outlined below:

- Employer's Representative: to manage projects during different phases.
- Environmental Control Officer: to oversea the implementation of EMP
- SHES Officer: Construction and Operations and Maintenance).

6.4.1 Employer's Representative (ER)

The ER is appointed by the Developer to manage all contracts for work/services that are outsourced during all development phases. Any official communication regarding work agreements is delivered through this person. The ER should with the commencement of the project appoint a competent ECO who will represent the Developer on-site. He/she will have the responsibility regarding the implementation of this EMP to ensure the necessary legal authorisations have been obtained; and to develop, managing implementation of and maintaining all development.

6.4.2 Environmental Control Officer (ECO)

The ECO should be a competent person who is the Developer's on-site representative primarily responsible for the monitoring and review of on-site environmental management and implementation of the EMP by the Contractor. If no ECO is appointed the duties of the ECO fall upon the ER. The ECO's duties include the following:

- Assisting the ER in ensuring that the necessary legal authorisations have been obtained;
- Maintaining open and direct lines of communication between the ER, Developer, the Construction and/or Operations and Maintenance Contractor, and Interested and Affected Parties (I&APs) with regard to this EMP and matters incidental thereto;
- Monthly site inspection of all construction and/or infrastructure maintenance areas with regard to compliance with this EMP;
- Monitor and verify adherence to the EMP (audit the implementation of the EMP) and verify that environmental impacts are kept to a minimum;
- Be fully conversant with the Environmental Management Plan.

6.4.3 Safety Health and Environmental (SHES) Officer

The SHES Officer should be a competent person to oversee safety, health and environmental affairs. He/she has the following responsibilities:

- Convey the contents of this EMP to the contractor and undertake inspection of the site to monitor compliance with the EMP.
- Report any non-compliance or remedial measures that need to be applied to the appropriate environmental authorities, in line with the EMP.
- Submitting a report at each site meeting which documents all incidents that have occurred during the period before the site meeting.
- Be fully conversant with the EMP.

6.4.4 Monitoring

A monitoring programme will be in place not only to ensure compliance with the EMP through the contract/work instruction specifications, but also to monitor any environmental impacts which have not been accounted for in the EMP. The following measures will be incorporated as part of the monitoring programme:

- A monitoring programme will be implemented for the duration of the construction phase. This programme will include monthly audits that will be conducted by the ECO/s for the duration of the construction phase – the ECO shall undertake this environmental monitoring with the audits considering compliance with the EMP, the EIA conditions, as well as the conditions of any permits and/or licenses.
- On-going monitoring is to be undertaken by the Contractors' Environmental Manager/Officer – this will include notification to the ECO and proponent EO should an incident take place.
- External auditing may take place at unspecified times by the authorities and/or other relevant authorities.
- An independent, suitably qualified, auditor will need to be contracted to conduct an audit once the construction phase of the project is completed according to the provisions of the EMP.
- The Contractor's Environmental Officer must undertake regular site inspections (at least twice weekly) to ensure all legislative requirements are adhered to. Proof of such inspections shall be kept on file for ease of reference or for audit purposes.

6.4.5 Contractor

The Contractor is responsible for the implementation of the EMP, on-site monitoring and evaluation of the EMP. It is envisaged that various contractors might be appointed at various periods for various tasks throughout the life cycle (construction through to decommissioning phase) of this project. In order to ensure sound environmental management, the relevant sections of this EMP should be included in all contracts of work outsourced thus legally binding all appointed contractors and sub-contractors.

Furthermore, all contractors shall ensure that adequate environmental awareness training of senior site personnel takes place and that all construction workers and newcomers are inducted on the environmental, health and safety issues related to the project as well as importance and implications of the proposed EMP. The induction process shall be conducted, as far as is possible, in the employees' language of choice. All environmental training sessions, including names, dates and the information presented should be recorded and be kept on site.

6.4.6 Environmental Specifications: Awareness, Training and Competence

It is important to ensure that all personnel have the appropriate level of environmental awareness and competence to ensure continued environmental due diligence and ongoing minimisation of environmental harm. To achieve effective environmental

management, it is important that employees, Contractors and Subcontractors are aware of the responsibilities in terms of the relevant environmental legislation and the contents of this EMP.

Environmental training may typically include the following:

- Employees must have a basic understanding of the key environmental features of the construction site and the surrounding environment;
- Employees will be familiar with the requirements of the EMP and the environmental specifications as they apply to the construction of the power station.
- Basic training in the identification of archaeological artefacts, and rare and endangered flora and fauna that may be encountered on the site.
- Awareness of any other environmental matters, which are deemed to be necessary by the ECO.

Records must be kept of those that have completed the relevant training. Training can be done both in a written or verbal format and in an appropriate language but will be in an appropriate format for the receiving audience. Where training has been done verbally, persons having received training must indicate in writing that they have indeed attended a training session. A regular form of written or verbal testing will have to be designed.

6.5 The Construction Phase and Construction Mitigation Details

All activities involved in the development phases of the service station have been identified together with all aspects that may have potential impacts. The construction phase of the EMP aims to address environmental and social risk pertaining to the construction phase.

Table 8 provides the Environmental Management Plan and its Implementation Strategy a large scale overview of all the major environmental management themes pertaining to the project activities.

Table 8: Environmental Management Plan (EMP)

Aspect	Impact	Mitigation	Indicator	Responsible Party
Waste Management Plan	There is a potential environmental contamination and degradation from waste on site.	The Contractor should compile a Waste Management Plan which should address as a minimum the mitigation measures included below	Correct handling of waste	Contractor and ECO
Hazardous waste	Impact on soil and water.	• All heavy construction vehicles and equipment on site should be provided with a drip tray. • The drip trays should be cleaned daily and spillage handled, stored and disposed of as hazardous waste. • Maintenance and washing of construction vehicles should be take place only at a designated workshop area. • The workshop should have an oil-water separator for collected run-off from washing. • Spilled cement and/or concrete (wet or dry) should be treated as hazardous waste and disposed of by the end of each day in the appropriate hazardous waste containers. • All hazardous substances or chemicals should be stored in a specific location on an impermeable surface that is bunded.	Correct handling, use and storage of materials, including hazardous material.	Contractor and ECO
General waste	The incorrect management of solid waste can result in the pollution of soil, groundwater and the general environment. Windblown litter can also contribute to a negative visual impact.	• 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. • No waste may be buried or burned. • Waste containers (bins) should be emptied regularly and removed from site to a recognised (municipal) waste disposal site. All recyclable waste needs to be taken to the nearest recycling depot. • A sufficient number of separate bins for hazardous and domestic/general waste must be provided on site. These should be clearly marked as such. • Construction labourers should be sensitised to dispose of waste in a responsible manner and not to litter. • No waste may remain on site after the completion of the project	Complaints from neighbours. No windblown waste. Contamination of the ground and water resources	Contractor and ECO

Sewage and grey water.	Incorrect management of sewage and grey waste may contaminate the soil, vegetation and underground water resources.	• Sewage should not be discharged directly onto open soil. • All sewage must be removed regularly and disposed of at a recognised (municipal) sewage treatment facility. • Grey water that is not recycled should be removed along with sewage on a regular basis. • Separate toilets should be available for men and women and should clearly be indicated as such. • Portable toilets (i.e. easily transportable) should be available at the construction site: • Sewage needs to be removed on a regular basis to an approved municipal) sewage disposal site. Alternatively, sewage may be pumped into sealable containers and stored until it can be removed. • Workers responsible for cleaning the toilets should be provided with latex	No sewage spills on site. No sewage and grey water pools on site.	ECO
Environmental Training of workers	Without proper training the health and safety of workers will be at risk and preventable environmental impacts could occur.	All construction workers are to undergo environmental induction (training) which should include as a minimum the following: • Discussion of the potential environmental impacts of construction activities. • Employees' roles and responsibilities, including emergency preparedness. • Explanation of the mitigation measures that must be implemented when particular work groups carry out their respective activities.	All employees adhere to the mitigation measures provided in this document.	MET and proponent
Communication	Inability to communicate the Environmental obligations effectively to responsible parties can result in unnecessary environmental degradation.	To ensure that the construction activities do not result in avoidable impacts on the environment by anticipating and managing the impacts. • All site instructions pertaining to environmental matters issued by the Contractor are to be copied to the ECO. • All sub-contractors, employees, suppliers or agents etc. must be fully aware of the environmental management requirements detailed in this EMP. • Have a copy of the EMP and ECC available on site at all times for reference purposes.	ECO is aware of decisions taken by the engineer and contractors. All relevant stakeholders are also kept up to date of activity taking place on site.	ECO, Contractor and proponent
Socio-economic impact	The activity could benefit local	Adhere to the legal provisions in the Labour Act (see Table 1) for the recruitment of labour (target percentages for gender balance, optimal	Contribute to employment and	Contractor and ECO

	Communities through job creation, however negative impacts are also possible and must be controlled.	use of local labour and SME's, etc.) in the Contract. The Contractor should compile a formal recruitment process including the following provisions as a minimum: • Recruitment should not take place at construction sites. • Ensure that all sub-contractors are aware of recommended recruitment procedures and discourage any recruitment of labour outside the agreed upon process. • Contractors should give preference in terms of recruitment of sub-contractors and individual labourers to those who are qualified and from the project area and only then look to surrounding towns. • Clearly explain to all job seekers the terms and conditions of their respective employment contracts (e.g. period of employment etc.) – make use of interpreters where necessary.	capacity building in the local community. Creating awareness amongst employees and the public.	
Heritage Resources	Heritage resources can be impacted on during the site clearance, earthworks and the construction of the facility.	Should a heritage site or archaeological site be uncovered or discovered during the construction phase of the project, a "chance find" procedure should be applied in the order they appear below: • If operating machinery or equipment stop work; • Demarcate the site with danger tape; • Determine GPS position if possible; • Report findings to the construction foreman; • Report findings, site location and actions taken to superintendent; • Cease any works in immediate vicinity; • Visit site and determine whether work can proceed without damage to findings; • Determine and demarcate exclusion boundary; • Site location and details to be added to the project's Geographic Information System (GIS) for field confirmation by archaeologist; • Inspect site and confirm addition to project GIS; • Advise the National Heritage Council (NHC) and request written permission to remove findings from work area; and • Recovery, packaging and labelling of findings for transfer to National Museum. • Should human remains be found, the following actions will be required: • Apply the chance find procedure as described above;	No heritage artifacts are disturbed or destroyed on site and the NHC is informed should any heritage artifacts be discovered on site.	ECO, Proponent and Contractor

		• Schedule a field inspection with an archaeologist to confirm that remains are human; • Advise and liaise with the NHC and Police; and • Remains will be recovered and removed either to the National Museum or the • National Forensic Laboratory.		
Topsoil	Topsoil may be removed during the site preparation and excavation process, which could lead to land degradation.	To minimise the erosion of topsoil: • When excavating, topsoil should be stockpiled in a demarcated area. • Stockpiled topsoil should be used to rehabilitate the nearest borrow area (existing borrow pits), if such an area is located less than 20 km from the stockpile.	All topsoil removed is rehabilitated to its natural state at the end of construction.	ECO and Contractor
Stormwater runoff, erosion, and pollution of surface water and groundwater resources	Contamination of storm water runoff can impact on the surface and groundwater resources. The mismanagement of storm water can furthermore result in erosion	• Prevent storm water from eroding the land and becoming contaminated. • Should construction activities for the proposed infrastructure need to take place within the drainage features (i.e. linear development including roads and transmission lines) this must transect the streams at right angles and be limited as far as possible to ensure minimum disturbance of such areas. • Demarcate a 100 m no-go zone from ephemeral watercourses during construction to prevent construction activities from occurring near the ephemeral watercourses to prevent further loss of vegetation, erosion and watercourse sedimentation. • Any disturbed areas must be rehabilitated as Rubble, sand and waste material resulting from the construction activities must be cleared up but not disposed in any stream or drainage channels as it will impede on the flow in these channels. • The abstraction of groundwater must be properly controlled within a prescribed water demand management plan and as required by the license conditions. • A critical groundwater level must be determined and the groundwater table must be maintained above such critical levels during water abstraction periods.	Stormwater not contaminated by construction activities. Storm water control measures are effective at regulating runoff from the site and erosion channels do not develop. Freshwater ecosystems are not unduly disturbed by construction activities within the drainage channels.	Contractor and ECO
Traffic	During the construction and operation phase, it is	To ensure that increased traffic volume is managed efficiently to minimize associated impacts: • Demarcate roads clearly.	Traffic is orderly, free flowing and controlled.	Contractor

	expected that there will be regular movement of vehicle to and from the site for transportation of workers and materials.	• Off-road driving should not be allowed. • All vehicles that transport materials to and from the site must be roadworthy. • Drivers that transport materials should have a valid driver's license and should adhere to all traffic rules. • Loads upon vehicles should be properly secured to avoid items falling off the vehicle. • Traffic movement to be planned in consultation with municipality. • Access road entrances must be demarcated, both at their exit point from existing roads and the entry point to the site. • Loading bay for fuel tanker to be suitably positioned to allow seamless traffic movement. • Erect signage to warn motorists about construction activities and heavy vehicle movement where appropriate.		
Dust	Dust generated from material handling, roads and stockpiles can become a nuisance to neighbours.	To avoid nuisance impacts caused by dust as far as possible: • A watering truck should be used on gravel roads with the most heavy vehicle movement especially during dry and windy conditions. • However, due consideration should be given to water restrictions during times of drought.	No complaints received from public and or site staff.	Contractor and ECO
Noise	The increase in traffic and operation of equipment such as welding and fixing of the racks may result in noise becoming a nuisance.	To ensure that noise from the construction activities do not exceed unacceptable levels: • Work hours should be restricted to between 08h00 and 17h00 where construction involving the use of heavy equipment, power tools and the movement of heavy vehicles is less than 500 m from residential areas • If an exception to this provision is required, all residents within the 500 m radius should be given 1 week's written notice. • Workers will be required to wear ear protecting devices whenever possible. • If the contractor needs to undertake activities outside the hours above, the residential and community receptors within audible range of the activity must be notified within 24 hours in advance of the planned activity.	No noise complaints received.	Contractor and ECO

Table 9: Working Area Mobilization

Aspect	*Impact*	*Mitigation*	*Indicator*	*Responsibility*
Demarcate the construction site	Without proper demarcation, the public would be able to access the site and would be at risk.	It is of outmost importance to prevent the encroachment of construction areas into surrounding environments.	Proper fencing in place to demarcate the construction	*Contractor*
Stockpiling of equipment and materials	Incorrect storing of materials can result in water and soil contamination, dust and or erosion. Incorrect storage and handling of materials also pose a risk of environmental contamination and could jeopardise the safety of public / site staff.	• Ensure that all materials and equipment handled and stored in a manner that environmental contamination and safety hazards are limited. • The IPP Contractor shall be advised by the Contractor of the housekeeping arrangements including areas intended for the stockpiling of materials. • Implement General Specifications as presented in this document.	• No public complaints or water/ soil contamination • Correct handling, use and storage of materials, including hazardous materials. • No incidents of environmental contamination. • No accidents or incidents related to the handling of materials.	*Contractor and ECO*
Ablution facility	The lack of adequate ablution facilities and recess areas can compromise the health of site staff and result in environmental degradation.	To minimise the potential environmental impacts associated with workers on the site: Implement General Specifications	Adequate ablution facilities are in place.	*Contractors and ECO*
Removal of vegetation	If the removal of vegetation is done incorrectly it may leave the site prone to erosion and compromise rehabilitation requirements post construction.	To ensure that the site is not prone to erosion and any disturbed areas can be rehabilitated as necessary post-construction: Implement General Specifications.	Topsoil conserved in stockpiles for later use if necessary.	Contractor and ECO
Excavations for bulk earthworks	Created embankments (cut and fill) and retaining walls are required to level and stabilise the site. Excavations are also required to accommodate bulk services which might impact on the environment.	To limit the impact to the environment caused by excavations: Implement General Specifications	No heaps of materials left on site after the construction phase.	Contractor and ECO
Removal of Equipment and temporary structures	If the construction site is not decommissioned it can result in environmental degradation	It is very imperative to leave the impacted area in an acceptable state: Implement General Specifications.	The area impacted by the construction activities pose no threat to the environment	Contractor and ECO

6.6 Operations and Maintenance

The following mitigation measures should be complied with and carried out during any maintenance works associated with the services infrastructure within the planned development areas.

Table 10: SHES Mitigation during operation and maintenance

Aspect	Mitigation measure
EMP Implementation	If any construction is to be conducted as part of maintenance works for the services infrastructure within the project area reference must be had to the construction mitigation measures of this EMP.
EMP and Procedures	To ensure the operation of the facility does not result in avoidable impacts on the environment, and that any impacts are anticipated and managed. The proponent must appoint a suitably qualified independent ECO to monitor compliance and compile and environmental audit report. This must be coupled to a compliance audit with the provisions contained within the EMP.
Socio-economic impacts	To ensure the operation of the facility maximises positive impacts on the socioeconomic environment, the following must be done: • Employ local labour for the operational phase, where possible, and particularly for day to day operations and maintenance. • Where possible encourage the use of local suppliers for procurement of goods, materials and services. • Implement training and capacity building programmes to enhance the ability of local community members to take advantage of available employment opportunities.
Protection of ecology	To prevent unnecessary disturbance to natural vegetation and fauna. • Any alien plants within the site footprint must be immediately controlled to avoid establishment of a soil seed bank. • Control measures must follow established norms and legal limitations in terms of the method to be used and the chemical substances used. • Ensure removal and control of existing invasive alien plant species (i.e. Prosopis sp.) onsite and within the surrounding 6 m wide fire break.
Stormwater runoff, erosion, and pollution of surface water and groundwater resources.	• Prevent stormwater from eroding the land and becoming contaminated. • The areas likely to contribute to contaminated runoff, such as the workshop must be designed to have hardened surfaces equipped with oil and grease traps to capture any contaminated runoff. These must be maintained during operation. • Should storm water infrastructure be required, a management plan must be in place to ensure as a minimum that the structures are visually monitored after large rainfall events to ensure that eroded areas do not develop. • Any refuse generated must be disposed of in suitable bins and removed from site at regular intervals. • Ensure proper groundwater abstraction Management strategies
Visual impact	To protect the sense of place: Keep access roads clear and keep all lighting minimal, within the requirements of safety and efficiency.
Noise impact	To ensure that noise from the operational activities does not exceed unacceptable levels. • All plant, equipment and vehicles must be kept in good repair. • When ordering plant and machinery, manufacturers must be requested to provide details of the sound power level. Where possible, those with the lowest sound power level (most quiet) must be selected.
Monitoring	The ECO should monitor the implementation of the Property Development EMP: before, during and after construction

6.7 Decommissioning

In terms of the Environmental Management Act, it is necessary to consider the environmental impacts of decommissioning of any development, however, Ondonga service station is expected to be operational for a period of 30 years or more. Thereafter, the service station facility could either be decommissioned or upgraded, depending on the feasibility.

According to Namibian Legislation, decommissioning is considered as a separate activity which should be dealt with on its own. This EMA requires the EIA to make recommendations that should be considered in the new EIA process prior to decommissioning. However, seeing the decommissioning phase is far in the future, these conditions are subject to change.

A decommission plan should address the removal of the main infrastructure associated with the service station such as fuel tanks and infrastructure. Such a plan must also address aspects such as monitoring and management of surface of surface water flows and erosion. The following mitigation measures are recommended from an ecological point of view as part of the closure phase:

- Rehabilitate all areas impacted on by the infrastructure
- Remove all construction waste; rip temporary tracks, if feasible, and replace the topsoil.
- Re-introduce indigenous vegetation (especially protected species – i.e. Mopane) should form part of the rehabilitation process

In terms of socio-economic impacts, the following mitigation measures are recommended:

- Maximise the use of local labour on decommissioning activities;
- Provide adequate notification to staff and other stakeholders of the pending decommissioning;
- Provide staff with references so that they can pursue work with other companies;
- If feasible, assist staff in finding employment at other operations.

The proponent should develop a closure plan to be updated on an annual basis commencing at least 10 years prior to the envisaged decommissioning. The closure plan should identify the targets and objectives for closure and will be important in allowing operations to work toward closure objectives. The proponent should commission specialist inputs from time to time to provide direction on the closure plan to ensure the end result is as closely aligned with prevailing best practice as is possible, thereby minimising the risk and potential costs associated with decommissioning phase. The various stakeholders should also be engaged as early on in the closure planning process to ensure their interests are known and catered for from the point of origin. The construction phase EMP could be used as a guideline to facilitate the detailed decommissioning phase EMP.

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Professional Profile: Environmental Assessor

Julius Antonius

Professional Biography

MSc. Occupational Health & Safety Management (University of Portsmouth, 2018 (Grad. IoSH, UK)
Msc. Environmental Engineering, Pollution Control and Monitoring, Metropolia University, Helsinki-Finland
MSc. Leadership & Change Management, NUST, Namibia 2021

Mr. Julius Antonius from Seanton Investment cc was appointed by the proponent (Nambaza Investments cc) as the Environmental Assessment Practitioner (EAP) to conduct the EIA for the application of the ECC for the construction of a service station at Otjimbingwe (Otjimbingwe Service Station).

Mr. Antonius is a private Environment, Health and Safety consultant from Seanton Investment Cc. He has diverse experience in the industry spanning more than 11 years.

He has extensive experience and knowledge as an environment, health, and safety professional with leadership roles ranging Roads Construction with Roads Authority, Medical health services with Namibia Institute of Pathology and Uranium mining operations of Rio Tinto, Dundee Minerals (Tsumeb) Copper smelting and processing of complex concentrate hazardous materials. He is familiar with all required industrial safety procedures in OHSE & Wellness. He is prepared to service and facilitate effective HSE coordination through the organization.

Mr. Antonius also has a history and a proven track record of accident & injury prevention, investigations and critical risk management integrated with Employee Wellness & Assistant Programs (EWP & EAP). A candidate who combines loyalty and dedication with strong attention to details and highly intellect in decision making, leadership and management.

Court
Swakopmund Court Report

Magistrate Court

Andapo James (23), appeared on a charge of robbery. The matter was postponed to 29 May for plea and trial. The accused is on bail.

Theron Riaan Abraham (52), appeared on a charge of malicious damage to property. The matter was postponed to 1 June for plea and trial. The accused is on bail.

Michael Nawaseb (41), appeared on a charge of assault with intent to do grievous bodily harm read with provisions of the domestic violence act, act 4 of 2003. The matter was postponed to 28 February for record and sentence. The accused is on bail.

Elton Gamathan (18) and Bathan Naobeb (18), appeared on a charge of housebreaking with intent to steal and theft. The matter was postponed to 12 April for juvenile pre-sentencing report. The accused is on bail.

Stanley Goagoseb (48), appeared on a charge of dealing in dependence-producing substance. The matter was postponed to 19 April for juvenile screening. The accused is on bail.

Joas Tico Doeseb (44), appeared on a charge of dealing in dependence-producing substance. The matter was postponed to 8 June for plea and trial. The accused have been warned.

Frans Muleka (34), appeared on a charge of malicious damage to property. The matter was postponed to 13 March because the docket was not at court. The accused is on bail.

Shatiwa Elago (26), appeared on a charge of using a vehicle without the owner's consent. The matter was postponed to 11 April for legal aid. The accused is on bail.

Marianza Erasmus (38), Anthony Erasmus (20), Anthony Erasmus (38), Irshane Rhode (18) and Tyrion Echardt (26), appeared on charges of assault with intent to do grievous bodily harm and malicious damage to property. The matter was postponed to 5 June for plea and trial. The accused are on bail.

Stephanus Kahere (25), appeared on a charge of fraud 1st alternative to count2-displaying a licence disc not applicable to the vehicle. The matter was postponed to 29 May for plea and trial. The accused is on bail.

Johannes Philipus (27), appeared on a charge of driving with an excessive breath alcohol level. The matter was postponed to 1 March for further investigation. The accused is on bail.

Rhien Goseb (27), appeared on charges of assault common read with provisions of the domestic violence act, act 4 of 2003 and violating a formal warning section 23 (1xb) of the combating of domestic violence act 4. The matter was postponed to 22 May for plea and trial. The accused is on bail.

Yombeka Werner (26), appeared on charges of murder-attempted murder read with provisions of the combating of the domestic violence act, act 4 of 2003, and kidnapping. The matter was postponed to 31 January for bail application. The accused remains in custody.

Elveritz Herman (27), appeared on charges of nature conservation ordinance- hunting of protected game and possession of game meat. The matter was postponed to 1 February for bail application. The accused remains in custody.

Fillemon Kamati (51), appeared on a charge of maintenance- failure to pay. The matter was postponed to 13 March for other reasons. The accused remains in custody.

Rudolph Kampunga (24), appeared on charges of assault with intent to do grievous bodily harm and assault by threat. The matter was postponed to 20 February for submissions. The accused is on bail.

Yvan Guim (27), Ziggy Nawaseb (26) and Bongani Tsuseb (30), appeared on a charge of robbery. The matter was postponed to 12 April for the co-accused to be rearrested. The accused are on bail.

Gabriel Gabriel (37), appeared on a charge of murder. The matter was postponed to 14 March for further investigations. The accused is on bail.

Eric Haraeb (37), appeared on a charge of murder. The matter was postponed to 12 April for the prosecutor general's decision. The accused remains in custody.

Nelson Gurirab (39), appeared on a charge of housebreaking with intent to steal and theft. The matter was postponed to 22 February for plea and trial. The accused re-mains in custody.

Titus Fudala Kauluma (24), appeared on a charge of robbery. The matter was postponed to 6 February because the docket was not at court. The accused remains in custody.

Matheus Natangwe Shanyengange (41), appeared on a charge of arms and ammunition act-discharge of a firearm. The matter was postponed to 3 May for plea and trial. The accused is on bail.

Martin Inoccio Gurirab (34), appeared on a charge of assault with intent to do grievous bodily harm read with provisions of the domestic violence act, act 4 of 2003. The matter was postponed to 22 February for plea and trial. The accused remains in custody.

CALL FOR PUBLIC PARTICIPATION

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DEVELOPMENT OF A SERVICE STATION ON ERF 266 OTJIMBINGWE

Notice is hereby given to all potential interested and Affected Parties (I&APs) that an application is made to the Environmental Commissioner in terms of the Environmental
Management Act (No.7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4879 of 6 February 2012) for the following:

Project Name: Otjimbingwe Service Station
Project Location: Erf 266, Otjimbingwe
Project Description: A service station with four dispensing pumps for petrol and diesel.
Date & Venue: 18 February 2023

In this respect, interested and affected parties (I&APs) are hereby invited to register and submit comments concerns or issues regarding this project to the Environmental Consultant, Mr Julius Antonius at j88antonius@gmail.com or at cell 0818778855 on or before 20 February 2023. All I&APs are also cordially invited to a public meeting to be held on site.

Walvis Bay Court Report

Paulus Mukalele (50), Drunk Driving (November 2021) The matter was postponed to 23 May 2023. Plea and Trial (Final Remand). On bail.

Joseph Mathias (54), Murder (December 2021) The matter is postponed to 23 February 2023. P. G Decision (Final Remand). Warned.

Andreas Amalwa Uusiku (33), Assault – Assault with intent to do grievous bodily harm. Bail was extended to 22 May 2023 and the accused is warned to appear at the Walvis Bay Magistrates Court.

Nekongo Tobias (26), Joseph Alfeas, Theft (August 2022) The matter was postponed to 8 March 2023. Section 55 Enquiry. The first accused has been warned and the second accused is in custody.

Ndilishange Angula (32), Assault common read with the provisions of the Domestic Violence Act, Act 3 of 2004. (July 2022) The matter is postponed to 13 March 2023. Further Investigation. In custody.

Petrus van Rooyen (49), Rape (March 2022) The matter is postponed to 28 February 2023. Plea in terms of section 119.

Anthony Afrikaner (31), Uwuseb Anthony, Theft (September 2022) The matter is postponed to 23 March 2023. The first accused is in custody and second accused is at large.

Martha Hamukato (31), Concealment of birth. (October 2022) Bail is extended to 9 March 2023. In custody.

Hilia Hilfilwe (31), Assault – Assault with intent to do grievous bodily harm (November 2022)The matter is postponed to 8 March 2023. Further investigation. On bail.

Micheal Ikela (35), Theft (January 2023) Bail was refused. Matter is postponed to 13 March 2023. Further Investigation. In custody.

Paulus Onesmus (35), Assault – Assault common

Johannes Ihemba (50), Second Hand Goods Act – Carrying on a business without a valid certificate (March 2022) The matter is postponed to 10 August 2023. Plea and Trial (Final Remand)

Paulus Nashilongo (26), Robbery (August 2022) The matter is postponed to 13 June 2023. Plea and Trial. In custody.

Keanu Clark (26), Gustavo Nkosh (26), Lotta Mokati (36), Housebreaking with intent to steal and theft (August 2022)The matter is postponed to 15 March 2023. Plea in terms of section 119.

Scam Alert Water Cuts

It has come to the attention of the Walvis Bay municipality that some individuals are misleading residents to make payments for their accounts that are in arrears into a bank account that does not belong to the Municipality of Walvis Bay.

These imposters call residents claiming to be senior officials from the municipality and that they are in danger of getting their water cut because their accounts are allegedly overdue. These imposters can also have your correct account number and they request for urgent payments to other bank accounts.

Residents are therefore advised to be vigilant and not to be deceived in this manner by parting with their hard-earned money unless they first verify the status of their accounts and then make payments only to Municipality of Walvis Bay banking account numbers.

STEP 1

Get an official account statement from our Customer Service desk at any of our offices or email customercare@walvisbaycc.org.na to get your statements via email.

STEP 2

Beware of imposters claiming to be from the municipality demanding that you urgently make a payment so that your water is not cut off. Immediately verify your account by contacting our Credit Control Section on:
Mr Chris Naobeb- 064-2013293 / cnaobeb@walvisbaycc.org.na
Helena Resandt- 064-2013278 / hdiergaardt@walvisbaycc.org.na
Robert Smith- 064-2013318 / rsmith@walvisbaycc.org.na
Petrus Petrus- 064-2013226 / ppetrus@walvisbaycc.org.na

STEP 3

The official municipal payment methods are online banking, banking apps, cash deposits at advanced ATMs, cellphone banking and debit orders.
Only use the following banking details to make payments for your municipal accounts:

STANDARD BANK
Branch code: 082272
Account #: 042859778

FIRST NATIONAL BANK
Branch code: 282172
Account #: 62241416470

NEDBANK
Branch code: 461072
Account #: 11000355188

BANK WINDHOEK
Branch code: 481872
Account #: 8002390018

*Quote the 12 digital account number reflected on the municipal account statement as reference when making payments. Wrong referencing leads to payments not being allocated correctly.
Send proof of payments to: payments@walvisbaycc.org.na

Contact: Ms Fransina Frederick
• T: 061 24 6136 • C: 081 231 7332 • E: fransina@confidentenamibia.com

CALL FOR PUBLIC PARTICIPATION

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DEVELOPMENT OF A SERVICE STATION ON ERF 266 OTJIMBINGWE

Notice is hereby given to all potential interested and Affected Parties (I&APs) that an application is made to the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4879 of 6 February 2012) for the following:
Project Name: Otjimbingwe Service Station
Project Location: Erf 266, Otjimbingwe
Project Description: A service station with four dispensing pumps for petrol and diesel.
Date & Venue: 18 February 2023

In this respect, interested and affected parties (I&APs) are hereby invited to register and submit comments concerns or issues regarding this project to the Environmental Consultant, Mr Julius Antonius at j88antonius@gmail.com or at cell 0818778855 on or before 20 February 2023. All I&APs are also cordially invited to a public meeting to be held on site.

ECUTS
ENVIRODU CONSULTING & TRAINING SOLUTIONS CC

PUBLIC PARTICIPATION/ENVIROMENTAL IMPACT ASSESSMENT FOR THE PROPOSED AQUAPONIC GREENHOUSE FARMING WITH COMPLETE SOLAR PLANT IN KEETMANSHOOP, //KARAS REGION, NAMIBIA

Unfamiliar Tank Ship was visible from Langstrand

Elleen van der Schyff

The Liquefied Gas Tanker, LNG SOKOTO (IMO: 9216303), sailing under the flag of Bermuda was docked just outside the Port of Walvis Bay in a quick stop over for provision, bunker or crew changes, before proceeding on her journey to Port of Bonny, Nigeria.

She arrived in Namibian waters after her departure from Dubai. Her last stop before this Namibian stop was at Port Louis, Mauritius. Her estimated time of arrival (eta) at Port of Bonny, Nigeria is 25 February. The tanker was built in 2002. Her carrying capacity is 137 500 cubic meters Liquid Gas and her current draught is reported to be 9.7 meters. Her length overall (LOA) is 288.73 meters and her width is 48.09 meters.

NOTICE

Urban Social Hub herewith intends to apply to the Swakopmund Municipal Council for the **"Resident Occupation Special Consent" to operate an "administrative office"** on the premises of Erf 3775, Unit nr 5, Swakopmund Proper (65 Libertina Amathila Avenue) as provided for in terms of Clause 6 of the Swakopmund Zoning Scheme. Details of which are obtainable from the General Manager: Engineering & Planning Services.

Any person having any objections to the proposed activity may lodge such objections or comments, duly motivated in writing, within 14 days of the last publication to the applicant or the Swakopmund Municipality before or on **24 February 2023.**

Contact Person: Ms. Y. Käser @ Cell: 081 220 9723 or email: yasmin@urbansocialhub.com

Or Mr. J. Heita (Manager: Town Planning), Tel: +264 (64) 4104403

CALL FOR PUBLIC PARTICIPATION

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DEVELOPMENT OF A SERVICE STATION ON ERF 266 OTJIMBINGWE

Notice is hereby given to all potential interested and Affected Parties (I&APs) that an application is made to the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4879 of 6 February 2012) for the following:

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Date & Venue: 18 February 2023

In this respect, interested and affected parties (I&APs) are hereby invited to register and submit comments concerns or issues regarding this project to the Environmental Consultant, Mr Julius Antonius at j88antonius@gmail.com or at cell 0818778855 on or before 20 February 2023. All I&APs are also cordially invited to a public meeting to be held on site.

Port of Walvis Bay News

Patrol Vessel, NPAOC ARAGUARI (IMO: 9526411), sailing under the flag of Brazil will dock at the Port of Walvis Bay today (10 February) from the Port of Luanda, Angola for a Naval visit. The Patrol Vessel was built 10 years ago with a length overall (LOA) of 91 meters and with of 13 meters.

Bulk Carrier, AFRICAN KALMIA (IMO: 9666431), sailing under the flag of Liberia docked at the Port of Walvis Bay on Wednesday, 8 February to discharge 8 433.38 Metric Tons (MT) Bulk Wheat. is a Bulk Carrier that was built in 2016 (7 years ago) and is sailing under the flag of Liberia. Her carrying capacity is 28 000 t Deadweight Tonnage (DWT) and her current draught is reported to be 8.7 meters. Her length overall (LOA) is 175 meters and her width is 27 meters.

Bulk Carrier, KIRAN AUSTRALIA (IMO: 9576961), sailing under the flag of Malta is currently docked at the Port of Walvis Bay after a 23-day-14-hour voyage from Port Haldia, India. The Bulk Carrier is loading 55 000 Metric Tons of Bulk Coal skips. Her carrying capacity is 63517 t Deadweight Tonnage (DWT) and her current draught is reported to be 7.5 meters. Her length overall (LOA) is 199 meters and her width is 32 meters.

Bulk Carrier, JASMUND (IMO: 9696840), sailing under the flag of Libe-ria will dock at the Port of Walvis Bay on 12 February from its previous destination, the Port of Kingston, Jamaica, to discharge Break Bulk only. Her carrying capacity is 38868 t Deadweight Tonnage (DWT) and her current draught is reported to be 9 meters. Her length overall (LOA) is 179.9 meters and her width is 28 meters.

NOTICE OF THE CONSENT APPLICATION IN TERMS OF THE WALVIS BAY TOWN PLANNING SCHEME

CONSENT: Pre-School and Day Care Centre **ON ERF NO:** 153 **TOWNSHIP/ AREA:** Narraville **STREET NAME & NO:** Sam Nujoma Avenue.

In terms of the Walvis Bay Town Planning Scheme, notice is hereby given that I/we, the undersigned, have applied to the Walvis Bay Municipality for permission to erect/establish on the site a/an: Pre-School and Day Care Centre.

Plans may be inspected or particulars of this application may be obtained at Town Planning, First Floor, Rooms 101 & 105, Civic Centre.

Any person having any objection to the approval of this application, must lodge such objection, together with grounds thereof, with the General Manager: Roads and Building Control, (Town Planning), Private Bag 5017, Walvis Bay and the applicant, in writing, not later than **24 February 2023.**

NAME AND ADDRESS OF APPLICANT: Anastacia Alvina Herbert, P O Box 8469, Narraville, Walvis Bay
namstem19@gmail.com

NOTICE OF THE CONSENT APPLICATION IN TERMS OF THE WALVIS BAY TOWN PLANNING SCHEME

CONSENT: Self Catering Unit **ON ERF NO:** 433A Langstrand **STREET NAME & NO:** Kuiseb Avenue 433A.

In terms of the Walvis Bay Town Planning Scheme, notice is hereby given that I/we, the undersigned, have applied to the Walvis Bay Municipality for permission to erect/establish on the site a/an: Self Catering.

Plans may be inspected or particulars of this application may be obtained at Town Planning, First Floor, Rooms 101 & 105, Civic Centre.

Any person having any objection to the approval of this application, must lodge such objection, together with grounds thereof, with the General Manager: Roads and Building Control, (Town Planning), Private Bag 5017, Walvis Bay and the applicant, in writing, not later than **3 March 2023.**

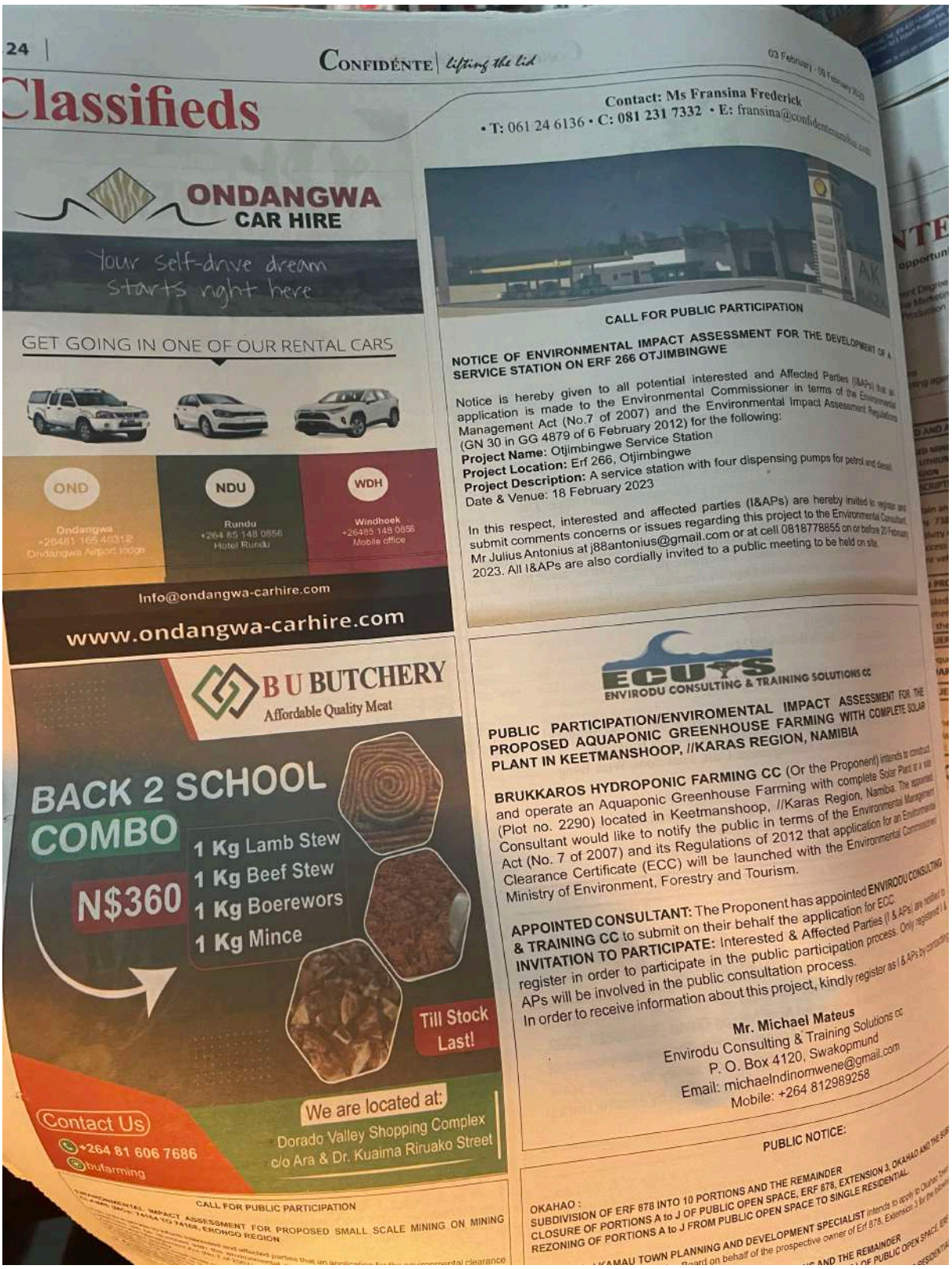
NAME AND ADDRESS OF APPLICANT: C & L Pretorius, P O Box 9788, Eros, Windhoek
email: christiaanflyfisher@gmail.com

Port Log

		[illegible]				
10-Feb	5:00	ARAGUARI	[illegible]	[illegible]	NAVAL	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11-Feb	5:00	MSC CAPRI	[illegible]	[illegible]	CONTAINER	[illegible]
[illegible]	4:00	[illegible]	[illegible]	[illegible]	CONTAINER	CMA CGM
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	8:00	TOPAZ ENDURANCE	[illegible]	[illegible]	TUG	[illegible]
[illegible]	5:00	[illegible]	[illegible]	[illegible]	MULTIPURPOSE	[illegible]
[illegible]	8:00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	5:00	[illegible]	[illegible]	[illegible]	F/V	[illegible]
[illegible]	5:00	[illegible]	[illegible]	[illegible]	F/V	TRADE OCEAN
[illegible]	3:00	[illegible]	[illegible]	[illegible]	CONTAINER	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F/V	TRADE OCEAN
[illegible]	8:00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	5:00	[illegible]	[illegible]	[illegible]	F/V	TRADE OCEAN
[illegible]	5:00	[illegible]	[illegible]	[illegible]	PASSENGER	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	CONTAINER	[illegible]
17-Feb	[illegible]	[illegible]	[illegible]	[illegible]	GENERAL CARGO	TRADE OCEAN
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	TUG	[illegible]
[illegible]	[illegible]	CMA CGM [illegible]	[illegible]	[illegible]	CONTAINER	CMA CGM
[illegible]	7:00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	4:00	APL CHARLESTON	[illegible]	[illegible]	CONTAINER	CMA CGM
[illegible]	8:00	PACIFIC [illegible]	[illegible]	[illegible]	TANKER	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	CONTAINER	[illegible]
[illegible]	8:00	[illegible]	[illegible]	[illegible]	TANKER	[illegible]

IMPORTANT NOTICE

Please note that the price of the Namib Times newspaper will increase from **N$4-00 to N$6-00** with effect from 3 March 2023



24 | CONFIDENTE | lifting the lid 03 February - 09 February 2023

Classifieds

Contact: Ms Fransina Frederick
• T: 061 24 6136 • C: 081 231 7332 • E: fransina@confidentenamibia.com

CALL FOR PUBLIC PARTICIPATION

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DEVELOPMENT OF A SERVICE STATION ON ERF 266 OTJIMBINGWE

Notice is hereby given to all potential interested and Affected Parties (I&APs) that an application is made to the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4879 of 6 February 2012) for the following:

Project Name: Otjimbingwe Service Station
Project Location: Erf 266, Otjimbingwe
Project Description: A service station with four dispensing pumps for petrol and diesel
Date & Venue: 18 February 2023

In this respect, interested and affected parties (I&APs) are hereby invited to register and submit comments concerns or issues regarding this project to the Environmental Consultant, Mr Julius Antonius at j88antonius@gmail.com or at cell 0818778855 on or before 20 February 2023. All I&APs are also cordially invited to a public meeting to be held on site.

ECUTS
ENVIRODU CONSULTING & TRAINING SOLUTIONS CC

PUBLIC PARTICIPATION/ENVIROMENTAL IMPACT ASSESSMENT FOR THE PROPOSED AQUAPONIC GREENHOUSE FARMING WITH COMPLETE SOLAR PLANT IN KEETMANSHOOP, //KARAS REGION, NAMIBIA

BRUKKAROS HYDROPONIC FARMING CC (Or the Proponent) intends to construct and operate an Aquaponic Greenhouse Farming with complete Solar Plant at a site (Plot no. 2290) located in Keetmanshoop, //Karas Region, Namibia. The appointed Consultant would like to notify the public in terms of the Environmental Management Act (No. 7 of 2007) and its Regulations of 2012 that application for an Environmental Clearance Certificate (ECC) will be launched with the Environmental Commissioner Ministry of Environment, Forestry and Tourism.

APPOINTED CONSULTANT: The Proponent has appointed **ENVIRODU CONSULTING & TRAINING CC** to submit on their behalf the application for ECC.
INVITATION TO PARTICIPATE: Interested & Affected Parties (I & APs) are notified to register in order to participate in the public participation process. Only registered I & APs will be involved in the public consultation process.
In order to receive information about this project, kindly register as I & APs by contacting

Mr. Michael Mateus
Envirodu Consulting & Training Solutions cc
P. O. Box 4120, Swakopmund
Email: michaelndinomwene@gmail.com
Mobile: +264 812989258

CALL FOR PUBLIC PARTICIPATION

ENVIRONMENTAL IMPACT ASSESSMENT FOR PROPOSED SMALL SCALE MINING ON MINING [illegible] ERONGO REGION

PUBLIC NOTICE:

OKAHAO :
SUBDIVISION OF ERF 878 INTO 10 PORTIONS AND THE REMAINDER
CLOSURE OF PORTIONS A to J OF PUBLIC OPEN SPACE, ERF 878, EXTENSION 3, OKAHAO AND THE SUR
REZONING OF PORTIONS A to J FROM PUBLIC OPEN SPACE TO SINGLE RESIDENTIAL
KAMAU TOWN PLANNING AND DEVELOPMENT SPECIALIST intends to apply to Okahao Town Board on behalf of the prospective owner of Erf 878, Extension 3 for the following:
AND THE REMAINDER
OF PUBLIC OPEN SPACE, ERF
RESIDENTIAL