

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CONSTRUCTION AND
OPERATION OF A PROPOSED FILLING STATION PROJECT AT
OMUTWEWOMUNHU VILLAGE – OSHIKUNDE CONSTITUENCY,
OHANGWENA REGION**



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PREPARED FOR: MARYN PROPERTIES CC

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| Project name | Environmental Impact Assessment for the construction and operation of a proposed fuel service station project at Omutwewomunhu Village – Oshikunde Constituency |
| Report title | Environmental Scoping Report And Environmental Management Plan |
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| | |

Executive summary

The proponent (Maryn Properties cc) proposes to develop and operate a service station in Omutwewomuhnu village – Oshikunde constituency, Ohangwena region, along the B10 Trans Caprivi Highway road (Okongo-Enhanaana road). The proposed development will result in the development of three fuel storage tanks of which two are petrol tanks and one for diesel tank connected to three dispensing pumps whereby each pump will have three nozzles. The proposed tanks will have a capacity of 23 000 litres of both petrol and diesel, totalling to a combined capacity of fuel storage of 46 000 litres (46 m³).

Omutwewomuhnu village enclosed Oshikunde constituency office and Oshikunde circuit office, this implies that most of the people travel to Omtwewomunhu for basic services. In addition, community members travel long distances of about 70 Km to Okongo and 40 Km to Enhanaana to look for filling station. This has opened up the need for transport services and related facilities like fuel service stations, and other related facilities. The entire area has no kinds of facility. Therefore, the proponent realised the need of fuel in this remote area, and thus proposed the development of a fuel service station.

This EIA is in accordance with the regulations stipulated in the Environmental Management Act (EMA) No.7 of 2007 and its Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012), as the fuel service station is one of the activities that cannot be undertaken without an environmental clearance certificate (ECC). This EIA is based on the project's submission to the EMA No. 7 of 2007. The building and subsequent operations of a fuel service station, as well as related activities, are the subject of the study project report. To comply with the EMA, an EIA study must be completed, and an EIA report (containing an Environmental Management Plan) must be created and submitted to the Ministry of Environment, Forestry and Tourism (MEFT) of Environmental Affairs (DEA) for consideration of an ECC.

Brief project description

The fuel service station will provide the following items: a small grocery store/ stop shop, administration office and ablution facility. The following service infrastructures will be created for the filling station's operation:

- Service area building
- Solid and sewer management facility

- Surface water drainage
- Access roads
- Firefighting equipment and
- Lighting

EIA methodology

This project's EIA was conducted in a holistic manner, adhering to all standards and regulations set forth in the Namibian Environmental Impact Assessment Regulations of 2012. Environmental Management Act 7 of 2007 was followed during the EIA procedure. Below is a summary of the methods used.

Scoping process

The scoping process was used to identify major issues that would be addressed in this study, as well as to determine which stakeholders should be consulted.

Stakeholder Consultations

The public was notified of the EIA activities via various platforms, and local communities were consulted for their perspectives on matters connected to the project's possible ecological and socio-economic consequences.

Impact Assessment and Evaluation

The existing and potential impacts linked with project activities discovered during the scoping phase were analysed using the checklist technique, and mitigation actions were given to minimize the significance to acceptable levels.

EMP drafting

An EMP was created to address environmental management statements for all phases of the project, and it is included in the EIA Report.

Public consultation

Public consultation was conducted as outlined in Section 21 of the EIA Regulations (2012), which outlines the processes to be done during a public consultation process. These steps were used to guide our process. Public consultations and newspaper releases have been used to formally involve the public in the project and the EIA study. Consultations with various stakeholders, the community, and other nearby residents yielded data that was useful for a variety of areas of the EIA. Communication with stakeholders and community members was

eased by the distribution of a Background Details Document (BID) including project information, as well as notices in the newspapers (Confidente and The Republik).

Major potential Environmental impacts identified

Table 1 Key identified potential environmental impacts

| Positive impacts | Negative impacts |
|--|---|
| <p>In the long term, the project's benefits will include an increase in permanent jobs and income opportunities, better site use, infrastructure improvements, and increased revenue for the constituency and national governments, among other things.</p> <p>In the short term, the project's positive impacts will include an increase in casual employment and artisans;</p> | <p>Wastewater/effluent run-off pollutes soil and water resources; Health and Safety risks and hazards, such as fire outbreaks.</p> <p>Pollution will harm the environment; noise pollution and air pollution (due to construction dust) and the possibility for project delivery trucks to emit pollutants.</p> |

The potential negative implications have been examined, and mitigation methods have been presented in the sections of this report that pertain to them.

Recommendations and Conclusion

It can be determined that the benefits of the Fuel Station activities outweigh the disadvantages discovered throughout the EIA process. The majority of the negative effects are minor, and they can be mitigated by following the specific suggestions outlined in each part of the EMP. Because the majority of the negative consequences are localized, particularly in terms of biodiversity loss, dust, and noise pollution, mitigation measures suggested in the Environment Management Plan should be strictly followed in order to reduce these effects as much as possible.

The project's concept is regarded helpful and important in terms of the project mitigation and environmental management methods that will be adopted during the construction and operation phases; and the developments' input to the proponent and the general public. Nonetheless, major attention should be directed toward minimizing the occurrence of consequences that would impair the environment as a whole. This can be mitigated, however, by ensuring that the

necessary Environmental Management and Monitoring Plans are closely monitored and implemented.

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Introduction

1.1 Project background

The proponent (Maryn Properties cc) proposes to develop and operate a service station in Omutwewomuhnu village – Oshikunde constituency, Ohangwena region, along the B10 Trans Caprivi Highway road (Okongo-Enhanaana road). The proposed development will result in the development of three fuel storage tanks of which two are petrol tanks and one for diesel tank connected to three dispensing pumps whereby each pump will have three nozzles. The proposed tanks will have a capacity of 23 000 litres of both petrol and diesel, totalling to a combined capacity of fuel storage of 46 000 litres (46 m³).

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This EIA is in accordance with the regulations stipulated in the Environmental Management Act (EMA) No.7 of 2007 and its Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012), as the fuel service station is one of the activities that cannot be undertaken without an environmental clearance certificate (ECC).

This EIA is based on the project's submission to the EMA No. 7 of 2007. The building and subsequent operations of a fuel service station, as well as related activities, are the subject of the study project report. To comply with the EMA, an EIA study must be completed, and an EIA report (containing an Environmental Management Plan) must be created and submitted to the Ministry of Environment, Forestry and Tourism (MEFT) of Environmental Affairs (DEA) for consideration of an ECC.

1.2 Purpose of EIA

The purpose of this EIA comprehensive report is to look at both the positive and negative effects that the project will have on the physical and socioeconomic environment. Early detection of potential impacts will help to ensure environmental sustainability since manmade elements will blend in with the natural environment, generating harmony. This analysis is a

valuable planning tool for the project proponent since it will identify any significant project impacts and clearly describe mitigation actions to minimize or mitigate negative consequences.

As a result, this EIA Report has been prepared in accordance with Namibia's 1995 Environmental Assessment Policy, the Environmental Management Act No. 7 of 2007 (Section 27(2)(a), Government Notice No. 29 of 2012 for Listed Activities and EIA Regulations, and the Petroleum Products and Energy Amendment Act, 1994 (Act 29 of 1994).

1.3 Terms of reference

The Proponent did not give any official project Terms of Reference. As a result, the EIA procedure for the planned fuel service station has been carried out in accordance with the EMA No. 7 of 2007 and its EIA Regulations. The application is submitted to a scoping and environmental impact assessment process as outlined in the Environmental Commissioner's 2012 EIA Regulations (GN 30 in GG 4878 of 6 February 2012) adopted under Section 27 (3) of the Environmental Management Act No.7 of 2007.

The adoption of an EIA as a management tool in this project would guarantee that the Proponent complies with local, national, regional, and international environmental legislation, standard design regulations, promote consultation, and reduce future liabilities, all of which would assist to conserve the environment. The EIA procedure included the steps listed below, which are detailed in this document:

- Give a full description of the proposed activity
- List all laws and regulations that apply to the proposed project
- A summary of the methodology used to conduct the EIA in accordance with Namibia's legal environmental framework
- Determine the sensitivity of existing environmental (both biophysical and socioeconomic) conditions in the area
- Provide details of the proposed project activities to Interested and Affected Parties (I&APs) and appropriate authorities, as well as a reasonable chance for them to participate in the process
- Evaluate the development's possible environmental and social implications, as well as the significance of those impacts
- Outline management and mitigation actions in the form of an Environmental Management Plan (EMP) to reduce and/or mitigate potential negative consequences

This assessment's project involves the following:

- Identification and assessment of potential (negative) implications of proposed project activities on the receiving environment, including the local community.
- Provide mitigating actions to avoid or mitigate all of the observed consequences.
- The major goal of this research is to apply for an ECC in accordance with the Environmental Management Act's requirements (Act No 7 of 2007).

2. Description of existing project activities

2.1 Project location

The proposed project development will be located at Omutwewomunhu-Oshikunde Constituency, Ohangwena Region along the B10 Trans Caprivi Highway road. The project is under the jurisdiction of Oshikunde constituency under the Omutwewomunhu Traditional Authority in the Ohangwena Region. The geographical coordinates of the proposed fuel service station are 17.58856° S, 16.90783° E (Figure 1). The proposed site land is allocated to the proponent by the Omutwewomunhu Traditional Authority for the purpose of developing the proposed construction of the fuel service station.

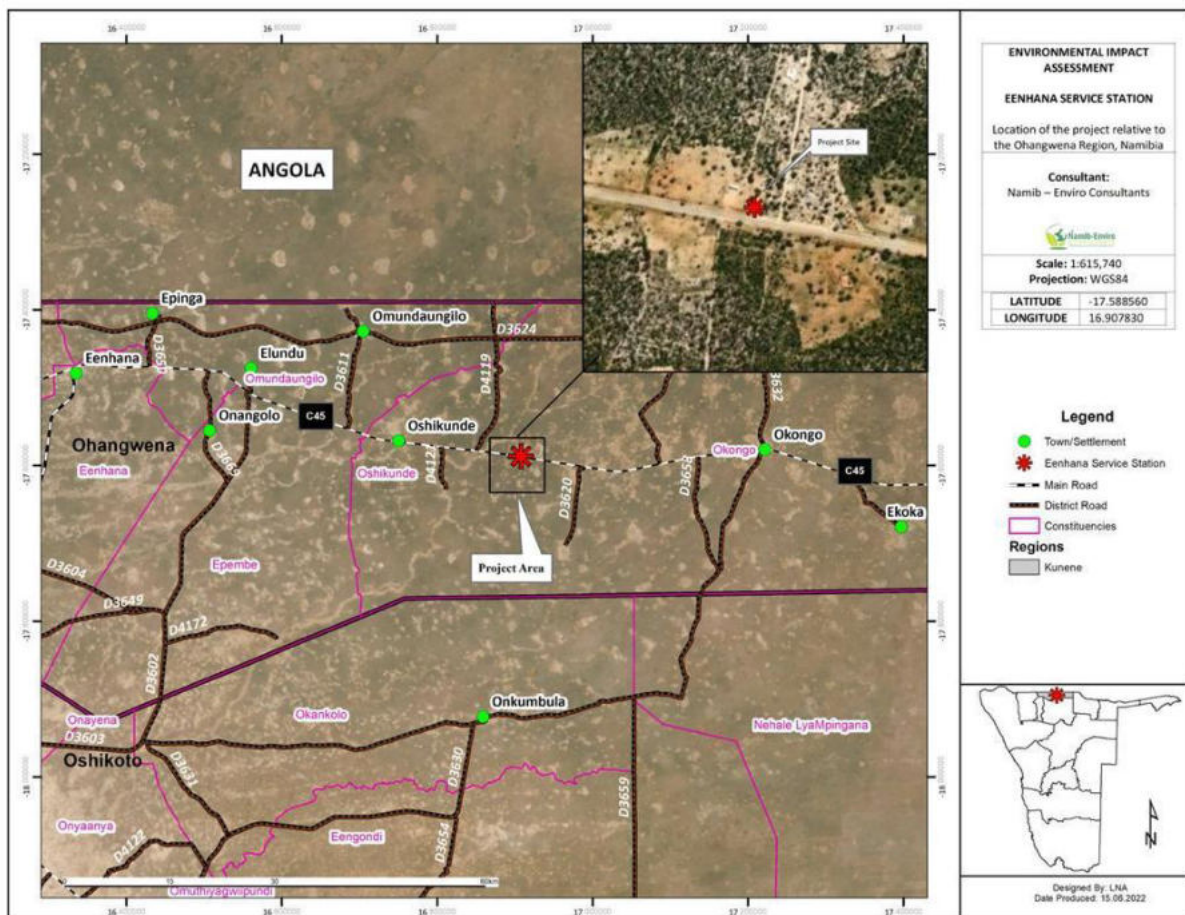


Figure 1 Locality map of the proposed project site

2.2 Project Description

2.2.1 Details of any nearby environmental features

The location was carefully chosen so that the service station will have no impact on waterways that may be harmed by discharges from the site. There are no environmentally significant features near the project site that could be harmed by service station discharge leaks; only few trees, and modest buildings/shops are close.

The proposed service station will supply liquid petroleum, a convenience store, and ablution facilities to Omutwewomunhu residents and residents of adjacent communities, as well as users of the Eenhana-Okongo road. The petroleum products that will be sold at the start of the project's operation are petrol and diesel. The Service Station aims to reach out to a wide range of people from many kinds of backgrounds. The connected facilities will be built in such a way that physically challenged people can use them. During the construction phase, public access to the service area will be prohibited. The construction area/site will be surrounded by zinc sheet barriers, limiting access to only construction and management employees.

2.2.2 Environmental Protection Measures

This study acts as the Environmental Impact Assessment that is presented to MEFT for approval as a document containing a detailed project description, outlining Policy, Legal, and other Administrative Frameworks to which the proponent must adhere. Environmental audits will be conducted on a regular basis during and after the tank is installed. Employees will be safe, and public health will be protected. Before any work commences, the site plan must be approved.

2.2.3 Site Layout

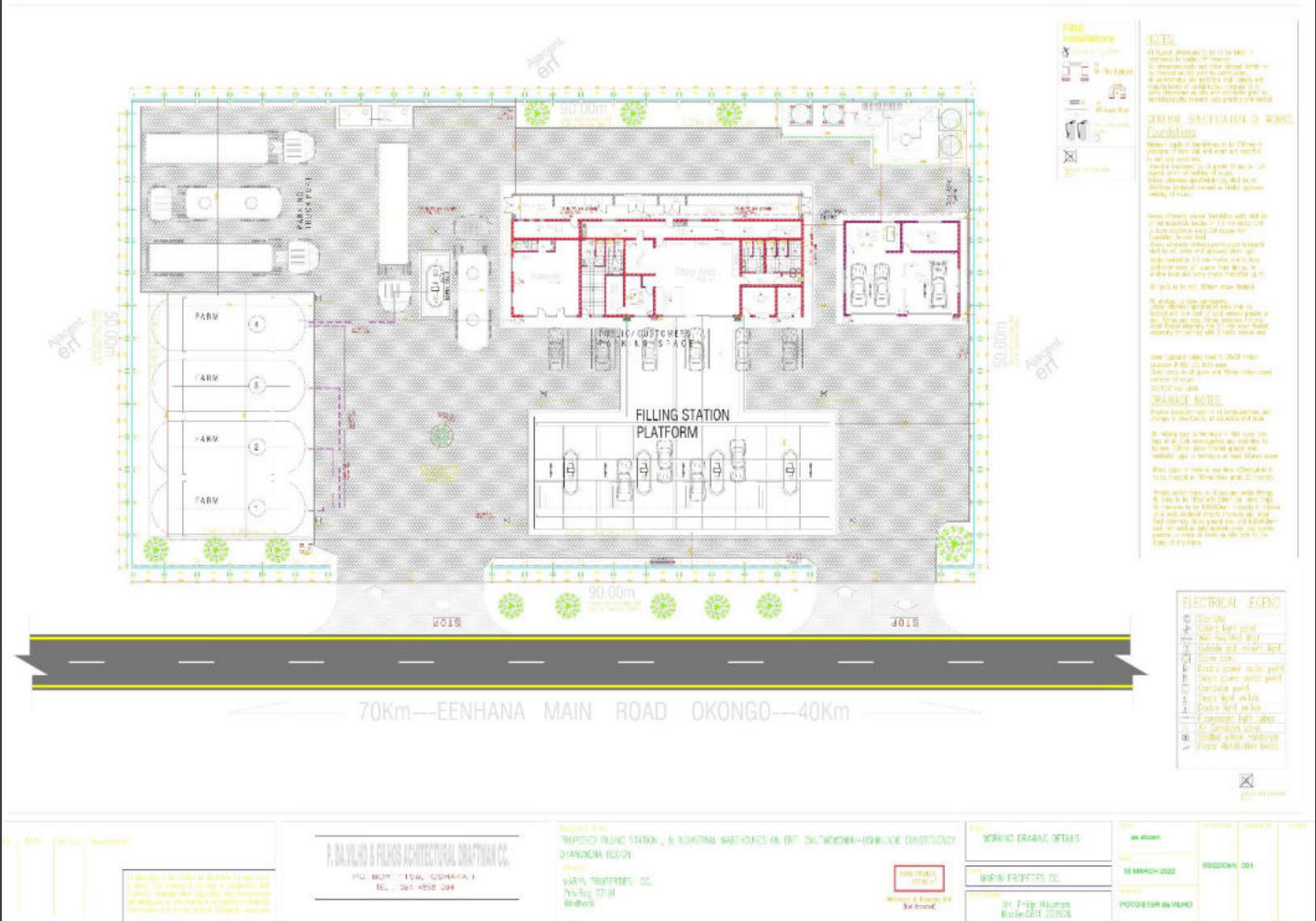


Figure 2 Site layout plan

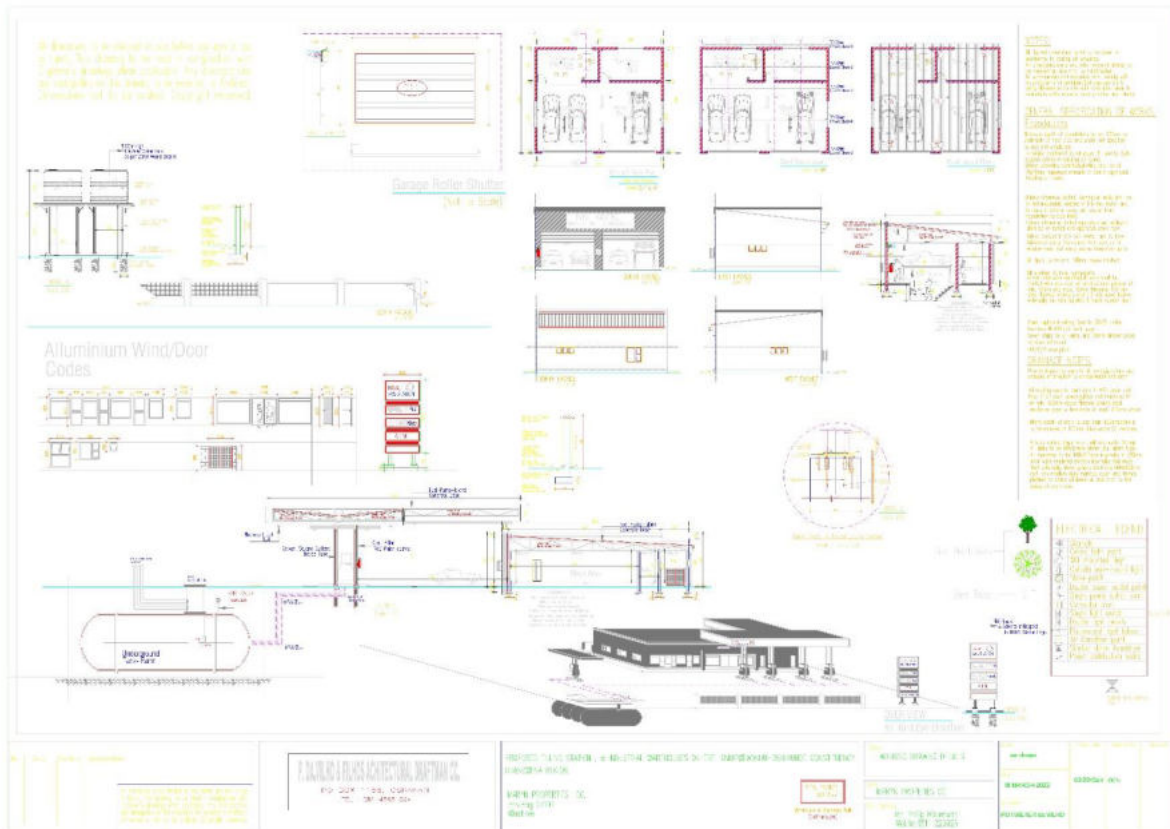


Figure 3 Service area infrastructure design

2.3 Proposed project activities

The following is a description of the activities related with the planned fuel service station preconstruction, construction, operating, and rehabilitation stages that have been examined as potential sources of impact in the impact assessment:

- Creating accessing right of ways to the service station
- Water and power supply (connecting to existing water supply system and power grids)
- Development of related fuel and value added infrastructure
- Closure and decommissioning and rehabilitation of the site

Construction, operation, and possible decommissioning are the three phases of the project. The following are the activities that are included in all phases:

2.3.1 Construction Phase

- Digging pipeline trenches and the tanks pits
- Transport and installation of storage tanks and other necessary equipment.

- Installation of fuel pipelines, as well as the development and installation of dispensing pump islands.
- Installation of the electrical supply that goes with it.
- Construction of related structures and infrastructure.

2.3.2 Operational Phase

- Road transport tankers will be used to fill storage tanks.
- Fuel will be dispensed into automobiles and other containers that have been authorized.

2.3.3 Decommissioning Phase

Removal of all infrastructure that will not be reused during future land usage; and land rehabilitation.

2.4 Solid waste and sewer management

Waste Management

Waste containers will be provided for each section to keep waste temporarily before it is delivered to the central solid waste collection facility. According to Ministry of Health Standards, the solid waste collection centre for the entire station will be strategically positioned and covered on top and on the sides to protect from weather and scavengers.

Sewer Management

There isn't a single sewer line that serves the entire expansion area. As a result, the planned site will be served by a traditional septic/soak pit system. This means that the Proponent will hire a waste management business that has been approved by NEMA to retrieve sludge from the septic tank on a regular basis.

2.5 Fire Fighting Protection

The proponent must guarantee that there are methods and procedures in place for water storage and supply in the event of a fire, as well as a fire foam system to protect fire-prone regions. To ensure safety in the event of a fire, an emergency water supply system will be erected around the Service Station. At least two fire extinguishers containing 9 kilograms of chemical powder will be on hand at all times, and the extinguishers will be checked every six months. To avoid fire triggering items being used in or around the facility, notices prohibiting smoking and cell phone usage must be prominently displayed in the forecourt.

2.6 Lighting

Within the facility, and in the vicinity of the service area, lighting will be provided along the entire length of the internal road network. This will be done so that vehicle routes and directions are easily observable at all times of the day and night.

2.7 Implementation Strategy

The project will begin with the marking of the project area, followed by fencing and the on-site construction of the service station. The project will entail the removal of overburden and the excavation of a trench for the fuel tank. The majority of the labour will be done manually.

3. Legal framework

This section examines the legal framework in which the fuel service station project's proponent must operate in order to meet environmental management criteria. This involves an emphasis on national and international legal compliance during the development, operational, and decommissioning phases of the project. The Proponent shall be guided by all applicable policy, regulatory, and other criteria in operating the project in compliance with best practices and environmental management requirements.

A list of activities that require an Environmental Clearance Certificate (ECC) is provided in Section 27 of the Environmental Management Act 2007 (Act No. 7 of 2007). The EMP should be compliant with the Environmental Management Act (EMA), Act No. 7 of 2007, and the 2012 EIA requirements (Government Notice: 30).

Table 2 Applicable environmental legal framework and their relevance to the project

| Legislation/policy | Provision | Relevance to the project |
|---|---|--|
| The Constitution of the Republic of Namibia (1990) | The articles 91(c) and 95(i) commits the state to actively promote and sustain environmental welfare of the nation by formulating and institutionalising policies to accomplish the Sustainable objectives. | Ecological sustainability should guide operations of fuel service station operations. |
| Environmental Assessment Policy (1995) | Promotes Sustainable development and Environmental Conservation emphasize the importance of Environmental assessments as a key tool towards environmental Sustainability. | Environmental Protection |
| Environmental Management Act No. 07 of 2007 | Requires that projects with significant environmental impact are subject to an environmental assessment process (Section 27). | All formal requirements as per the act will be duly identified and adhered to. The Project will follow this act accordingly and consider |

| | | |
|--|--|---|
| | | all aspects inclusive of the assessment process and acquire environmental clearance. |
| EIA Regulations 2007 | Details requirements for public consultation within a given environmental assessment process. Details the requirements for what should be included in a Scoping Report. | |
| Petroleum Products and Energy Act (No. 13 of 1990) Regulations (2001) | Regulation 3(2)(b) states that “No person shall possess or store any fuel except under authority of a licence or a certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area | A Petroleum Retail License should be applied for and obtained from the Petroleum Affairs Division of the Ministry of Mines and Energy (MME). |
| Soil Conservation, 1969 (Act 76 of 1969) and the Soil Conservation Amendment Act (Act 38 of 1971) | Makes provision for the prevention and control of soil erosion | Monitor and apply the soil conservation mechanisms |
| The Water Act 54 of 1956 | The Act was formulated to consolidate and amend the laws relating to the control, conservation and use of water for domestic, agricultural, urban and industrial purposes; to make provision for the control, in certain respects, of the use of sea water for certain purposes; for | Projects of this type are usually associated with activities that may directly affect water conservation, management and use therefore, requires the implementation of water conservation techniques. |

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| | the control of certain activities on or in water in certain areas. | |
| Forest Act 12 of 2001 Forest Act Regulations 2015 | To provide for the protection of the environment and the control and management of forest. Relevant sections: Approval required for the clearance of vegetation on more than 15 hectares (Section 23, subsection 1 (b)). | Forestry permits maybe required for vegetation clearing |
| Public Health Act (Act No. 36 of 1919) | Advocates for Public Health and safety | Personal Protective Equipment (PPE) |
| The Occupational Safety and Health Act No. 11 of 2007 | Advocates for employee and public safety, health | In the working context “SAFETY” implies “free from danger” |
| Communal Land Reform Act 5 of 2002 | To provide for the allocation of rights in respect of communal land; to establish Communal Land Boards; to provide for the powers of Chiefs and Traditional Authorities and boards in relation to communal land; and to make provision for incidental matters | Ensure communication and necessary approvals to communal developmental activities |
| National Solid Waste Management Strategy | The Strategy ensures that the future directions, regulations, funding and action plans to improve solid waste management are properly co-ordinated and consistent with national policy, and to facilitate co-operation between stakeholders | Waste management plans |

| | | |
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| <p>Pollution Control and Waste Management Bill</p> | <p>The bill aims to “prevent and regulate the discharge of pollutants to the air, water and land” Of particular reference to the Project is: Section 21 “(1) Subject to subsection (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse.”</p> <p>Section 55 “(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment.”</p> | <p>The Project should make it mandatory that all their site waste produced as a result of their activities, directly or indirectly is managed in a manner that do not cause environmental threat and risk both to the surroundings and the local communities.</p> |
| <p>Road Traffic and Transport Act, No. 22 of 1999</p> | <p>The Act provides for the establishment of the Transportation Commission of Namibia; for the control of traffic on public roads, the licensing of drivers, the registration and licensing of vehicles, the control and regulation of road transport across Namibia's borders; and for matters incidental thereto.</p> | <p>The Proponent will be required to obtain all the relevant permits (access road) in order to undertake activities involving road transportation or access onto existing roads.</p> |
| <p>Labour Act 11 of 2007</p> | <p>Empowers the minister responsible for labour to publish regulations pertaining to health and safety of labourers (S135). Details requirements regarding minimum wage and working conditions (S39-47).</p> | <p>All contractors involved in the project and transportation of the tanks are required to complying with this Act and its regulations.</p> |

4. Description of the current environment

4.1 Geographic and demographic

The Ohangwena Region is a flat plain that stretches from east to west along the Angolan border. The Oshanas' ephemeral wetlands support an open environment with palm and marula trees in the west, while forests dominate in the east. There are no permanent rivers in the area. With 21.3 persons per km², it boasts Namibia's highest population density. Ninety-nine percent of the population lives in rural areas and subsists nearly entirely on rain-fed agriculture. The Ohangwena Region's rainfall allows dry land cultivation, particularly of pearl millet (mahangu) in the western parts of the region, as well as cattle grazing that extends into the woodlands. Non-timber forest products are used to augment farming (IECN, 2011).

The Ohangwena Region falls under two major landscapes: Cuvelai and Eastern Kalahari Woodlands. The Cuvelai landscape covers about a third of Ohangwena Region on the west, while the Eastern Kalahari Woodlands biome dominates most of the central and north-eastern parts of Ohangwena Region (Hasheela, 2010).

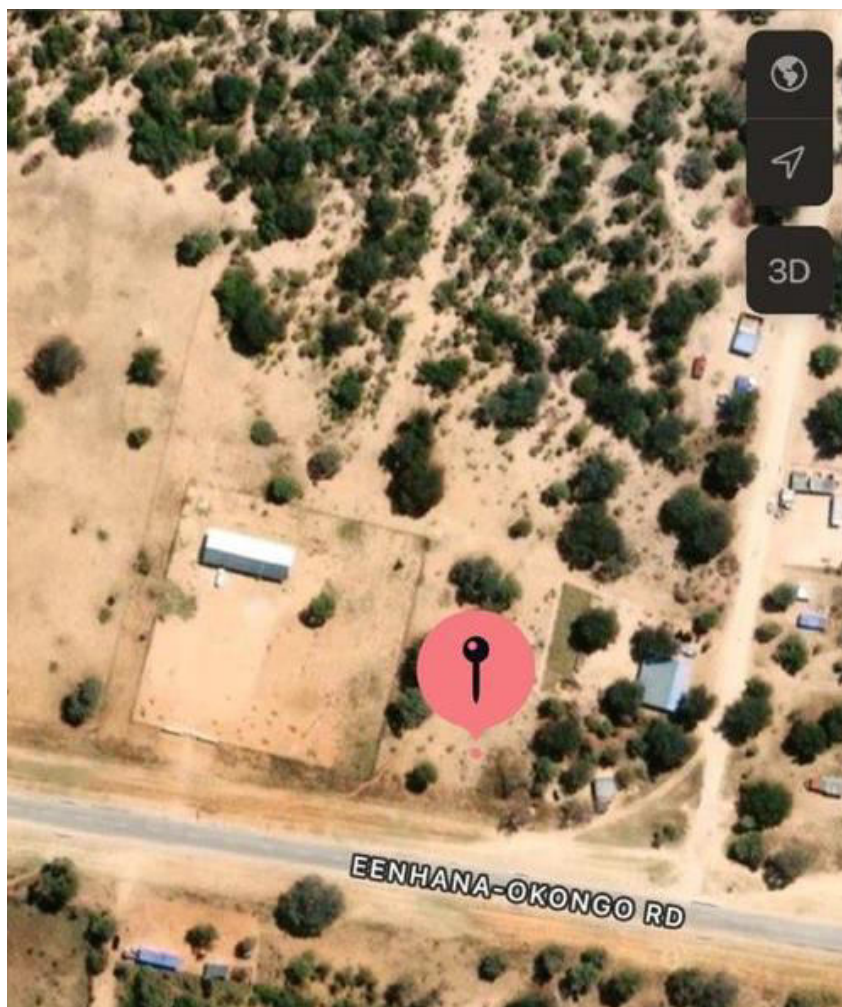


Figure 4 Google map view for the proposed project site

4.2 Climatic baseline

According to IECN (2011), rainfall varies from 480 mm in the west to 600 mm in the east on an annual basis. Rainfall often begins towards the end of October and finishes in early April. The distribution is unpredictably uneven. The average winter temperature is little around 20 degrees Celsius, and the average summer temperature is roughly 28 degrees Celsius. In the summer, maximum temperatures reach around 35°C, while typical lows in the winter hover around 8°C.

4.3 Hydrology

4.3.1 Groundwater

Ground water is the region's primary source of water. During the rainy season, surface water is found in the flood plains (Oshana), and towards the end of the rainy season, water is found in natural ponds (Omadhiya). Man-made boreholes store surface water that generally lasts between rainy seasons.

4.3.2 Flood risk

Due to the presence of many flood plains related with the Cuvelai basin, the Ohangwena region is severely impacted by floods, particularly in the western half of the area.

4.4 Soil

Namibia's northern region, known as the "Cuvelai-Etosha-Basin," was produced millions of years ago by sand deposits from water-borne deposits. The Kalahari Basin was produced by these sand and water-borne deposits. The Kalahari Group is made up of sand, clay, and calcrete deposits. Eenhana is part of a huge sedimentary basin that covers parts of Angola, Namibia, Zambia, Botswana, and South Africa and is part of the much larger Kalahari Basin.

4.5 Flora and fauna

Omutwewomunhu's vegetation is nearly homogeneous, and it is part of the North-eastern Kalahari Woodland, which is made up of broadleaved trees and shrubland. Because of their proximity to business district, all prospective development sites are in some way disturbed. Large trees, shrubs, and grass species such as *Burkea Africana*, *Terminalia species*, *Combretum species*, and a few *Acacia erioloba* dominate the onsite vegetation, while sub-climax grass species such as *Panicum maximum*, *Digitaria sericia*, *Brachiaria*, *Eragrostis species*, and others dominate the local grass species (Mendelsohn, el Obeid, & Roberts, A profile of North-Central Namibia., 2000).

4.6 Socio-economic

The Ohangwena economy is focused on subsistence farming, with crop farming and livestock herding employing 80 percent of the population. Most households in the region rely on farming and labor migration as their primary sources of income. The region's unemployment rate is high, at 36%. In Ohangwena, the dependency ratio is extremely high, with each worker supporting seven dependants, compared to 4.5 dependants per worker in Namibia as a whole. Apart from agricultural endeavors, most households rely on non-timber forest products (NTFPs) like as firewood and wild fruits harvested from the veld for a portion of their income. In terms of direct use, human nutrition, and revenue production, NTFPs contribute to the well-being of rural households (Musaba & Sheehama, 2009).

5. Environmental Impact Assessment

Namib-Enviro Consultants will adopt an Environmental Management Plan (EMP) in accordance with Namibian environmental regulations and international methodologies in hopes of preventing, minimize, and mitigate any negative consequences while promoting good outcomes. This chapter will analyse possible environmental and socio-economic consequences based on the current environmental and social structure of the project operations on ground.

5.1 Impact assessment methodology

The magnitude and temporal and spatial scales of the project, as well as the specific activities involved with the project, are used to determine the significance of an impact. At all times, the evaluation of the environmental effects of development operations should attempt to be objective and unbiased. Environmental activities, on the other hand, are vulnerable to the subjectivity that comes with attempting to quantify significance. The significance of an effect is determined by the context (spatial and temporal scale) as well as the strength of that impact.

5.2 Impacts assessing criteria

The extend ,magnitute, and duration of each impact will be detailed. These criteria would be used to determine the significance of the impact, first without mitigation and then with the most effective mitigation solution or measures in place. The mitigation described in the Scoping Report would include the wide range of feasible and practical options.

Table 3 Criteria for assessing impacts

| Criteria | Category | Description |
|--|---------------|---|
| Criteria for ranking Spatial impact | National | Beyond a 10 Km radius of the site |
| | Regional | Within a 5 Km radius of the centre of the site |
| | Local | Within a 2 Km radius of the the centre of the site |
| | Site specific | On site or within the boundaries of the property |
| | Zero | |
| | High | Natural and/ or social functions and/ or processes are severely altered |

| | | |
|---|---------------|---|
| Criteria for ranking the magnitude of impacts | Medium | Natural and/ or social functions and/ or processes are notably altered |
| | Low | Natural and/ or social functions and/ or processes are slightly altered |
| | Very low | Natural and/ or social functions and/ or processes are negligibly altered |
| | Zero | Natural and/ or social functions and/ or processes remain unaltered |
| Criteria for ranking the duration of impact | Zero | Zero time |
| | Short term | Up to 18 months |
| | Medium term | 0-5 years (after operation) |
| | Long term | 5- 10 years (after operation) |
| | Permanent | More than 10 years (after operation) |
| Probability | Definite | Estimated greater than 95 % chance of the impact occurring |
| | Very likely | Estimated 50 to 95% chance of the impact Occurring |
| | Fairly likely | Estimated 5 to 50 % chance of the impact Occurring |
| | Unlikely | Estimated less than 5 % chance of the impact occurring |
| | Zero | Definitely no chance of occurrence |
| Confidence | Certain | Wealth of information on and sound understanding of the environmental factors potentially influencing the impact |
| | Sure | Reasonable amount of useful information on and relatively sound understanding of the environmental factors potentially influencing the impact |

| | | |
|---------------|--------------|--|
| | Unsure | Limited useful information on and understanding of the environmental factors potentially influencing this impact |
| Reversibility | Irreversible | The activity will lead to an impact that is permanent |
| | Reversible | The impact is reversible, within a period of 10 years. |

5.3 Identified potential impacts and mitigation measures

Mitigation measures should be identified for each impact analyzed in order to lessen and/or avoid unfavorable consequences. These mitigation measures are also included in the Environmental Management Plan (EMP) to guarantee that they are carried out throughout the planned activity's life cycle. The EMP is included in the Scoping Report, and its implementation becomes a legally binding obligation after the project is approved. Possible impacts of the project are summarised in the Table 3 below based on the information acquired during the field assessment, and their mitigation measures.

Table 4 Potential impacts and mitigation measures

| Impacts due to the construction of the service station | Measurement | Rating | Mitigation |
|---|--------------------|---------------|---|
| Landscape alternation: digging and excating | Duration | Permanent | If possible rehabilitate the site after construction |
| | Extent | Site specific | |
| | Magnitude | Low | |
| | Probability | Fairly likely | |
| | Reversible | Reversible | |
| Access roads: establishment of road tracks | Duration | Permanent | Use existing municipal access roads |
| | Extent | Site specific | |
| | Magnitude | Low | |
| | Probability | Very likely | |
| | Reversible | Reversible | |
| | Duration | Short-term | If an oil spill occurs, collect the contaminated soil, store in drums |

| | | | |
|---|--|--|--|
| Oil spills: soil pollution (oil leakage from machinery) | Extent Magnitude Probability Reversible | Local Low Definite Reversibility | or appropriate structures and dispose at approved waste disposal site; Ensure all vehicles / machinery are well service, install drip trays and conduct regular leak inspection |
| Pollution: noise and dust (extraction and transportation of the sand and concrete) | Duration Extent Magnitude Probability Reversible | Short-term Local Medium Definite Reversible | Use dust suppression measures to mitigate dust impacts Provide dust masks and ear muffs to machinery operators |
| Socio-economic environment: development and employment opportunities | Duration Extent Magnitude Probability Reversible | Long and short-term National & local Medium Definite Reversibility | Employ local labour as far as possible Establish on the job training and other capacity development training programs |

5. Public participation

5.1 Overview

It is a norm that public consultation is required by legislation (EMA No. 7 of 2007) to be included in an EIA process, it is a major element of the EIA. By incorporating Interested and Affected Parties, public consultation ensures sound decision-making. As a result, the Public Participation Process (PPP) has been constructed to give I&APs the opportunity to learn more about the proposed project, provide input through document/report reviews, and raise any issues of concern during the PPP process.

5.2 Identification of Interested and Affected Parties (I&APs)

The EIA team identified I&APs and key stakeholders of the proposed project after the scoping process. The actions for public engagement in this EIA process have been incorporated into the overall approach of the EIA background information. I&APs were given the opportunity to register with the EIA team, and a separate database was built to store all of their names and correspondence information. It takes twenty-one (21) days for I&APs to be registered.

5.3 Distribution of Background Information Document (BID)

Pre-registered I&APs received a Background Information Document (BID), and the rest of the I&A Parties were added to the public consultation database upon request. The BID gave a synopsis of the proposed project, as well as the project proponent and the entire EIA procedure to be followed.

5.4 Public Announcement

Notification of the start of the EIA process for the project was advertised in two Namibian national newspapers, *Republiek* and *Confidante*, in accordance with Section 21 (2)(c) of the EMA Act No. 7 of 2007. (Appendix). The advertisements essentially informed the public about the project and the EIA study, as well as inviting them to participate. In addition, the newspaper advertisements asked I&APs to register.

Two public notices have been placed at two nearby places, one at the proposed project site along the B10 Trans Caprivi Highway Road and the other displayed at Oshikund constituency office. The purpose of the notices was to inform the general public about the EIA study and how they could register as I&APs and submit their views and concerns about the proposed development activity, as well as how they could participate.

5.5 Public consultation meetings

One public meetings was held at the Oshikunde constituency office, with the Traditional Authority, project proponent, EIA Consultants, the general public, and other stakeholders in attendance. The meeting took place on 18th May 2022. As Appendix , all of the registries have been attached.

There was no issue raised, and the public was delighted and eager to help in any way they could because they see the development as very own, particularly in terms of the reduced distance they had to travel in search of fuel.



Figure 5 Public participation meeting that was held at Oshikunde Constituency Office on the 18th May 2022

6. Conclusion

The EIA procedure for the proposed construction of the fuel service station development was carried out in accordance with the EIA Regulations published in Government Notice No. 30, in accordance with Section 56 of the Namibia Environmental Management Act, 2007. (Act No. 7 of 2007).

As a result, the public consultation process has been fair, with every attempt taken to include individuals from all stakeholders. Additionally, the proposed project plan includes mitigating measures to ensure that all applicable laws and regulations are followed. Businesses are regarded advantageous and vital in relation to the proposed mitigation measures that will be implemented throughout the construction phase, the development's contribution to society, and the fact that the project is economically and environmentally sound.

The EMP adequately addresses the issues of oil spills, fire risk, tank leakage, and land/water pollution. With the adoption of this EMP, the proposed project functioning will constitute a significant environmental danger. In addition, the detected possible negative consequences linked with the proposed project and related activities were deemed to be of medium magnitude. This findings suggest that the project be permitted and an environmental clearance certificate be granted to the approving authority.

References

Hasheela, R. L. (2010). *Adaptation of farmers to climate change in Ohangwena region, Namibia*. University of the Free State.

IECN. (2011). *Let's act to adapt: Dealing with climate change; A community information toolkit on adaptation*. Ministry of Environment and Tourism. MET.

Mendelsohn, J., el Obeid, S., & Roberts, C. (2000). *A profile of North-Central Namibia*. Windhoek: Gamsberg Machmillan Publishers.

Mendelsohn, J., Jarvis, A., Roberts, C., & Robertson, T. (2002). *Atlas of Namibia: a portrait of the land and its people*. Cape Town: David Philip Publishers.

Musaba, E. C., & Sheehama, E. (2009). The Socio-economic factors influencing harvesting of Eembe (*Berchemia discolor*) wild fruits by communal households in the Ohangwena region, Namibia. *Namibia Development Journal*, 1, 2.

Appendices

Appendix A Public notice that was displayed at the Oshikunde Constituency Office



PUBLIC NOTICE

ESTABLISHMENT OF TOWNSHIP: OTJOMUISE EXTENSION 12


Notice is hereby given in terms of Section 107 of the Urban and Regional Planning Act, 2018 (Act No. 5 of 2018), that HEH Urban Nest Creations has applied to the Windhoek Town Council and intends on applying to the Urban and Regional Planning Board for approval for the proposed Establishment of a Township of Otjomuise Extension 12 in terms of Sections 104 & 105, of the Urban & Regional Act 5 of 2018. Additionally, further alteration or cancellation of General Plan of Portion 304 (a portion of portion b) of the Farm Windhoek Town ad Townlands no.31 in accordance with Section 80 of the Urban and Regional Act 5 of 2018.

Otjomuise Extension 12 will comprise of 166 erven and the Remainder Street, and the main purpose of the township establishment is to create more residential erven in Windhoek, in order for Council to address the continues housing backlog.

The plan for the proposed township lies for inspection on the Town Planning Notice board at the City of Windhoek Customer Care Centre, main municipal offices, Rev. Michael Scott Street, Windhoek and the office of the Ministry of Urban and Rural Development, Division: Planning, second floor, room No. 237, GRN Office Park in Windhoek.

Further take note that any person who wishes to object to the application as set out above may lodge such objection together with their grounds thereof in writing, with the City of Windhoek, directed to the Chief Executive Officer, P.O. Box 59, Windhoek, within 14 days after the publication of this notice. The last date for any objections is: 1 July 2022.

| | |
|--|---|
| <p>COUNCIL: City of Windhoek P. O. Box 59 Windhoek Tel: 061 290 2375 Hiima.Hamata@windhoekcc.org.na</p> | <p>APPLICANT: HEH Urban Nest Creations P. O. Box 4453 Walvis Bay Tel: 064 220 275 info@urbannest-na.com</p> |
|--|---|

Namib-Enviro consultant herewith gives notice in terms of the Environmental Management Act, 7 of 2007 and Regulation 21 of the Environmental impact assessment (EIA) for the proposed construction and operation of a filling station at ohangwena oshikunde(omtwe womnhu).

PROPOSER: MARYANA PROPERTIES CC

DESCRIPTION OF ACTIVITY: CONSTRUCTION AND OPERATIONS OF A FILLING STATION

LOCATION OF THE AREA: OHANGWENA REGION OSHIKUNDE,(OMTWE WOMNHU)

Interested and Affected parties (I & AP) are invited to register with Namib-Enviro consultants for the proposed construction and infrastructure activities within 14 days of the advertisement.

Registration can be done by requesting of the Background information document provided in the email below. Any persons having any objection to the email below by: 2 June 2022

Email: namibenviro@gmail.com
Cell: 081-4801644



MUNICIPALITY OF HENTIES BAY

NOTICE

INTENTION TO ALIENATE A PORTION OF REMAINDER OF THE FARM NO.133 HENTIESBAAI TOWNLANDS TO MESSRS DIANNE BURGER

By virtue of Council Resolution CO8/28/04/2022/03rd/2022 and in terms of Section 63 (2)(b) of the Local Authorities Act, (Act 23 of 1992) as amended, read in conjunction with Section 30 (1)(f) of the Local Authorities Act, 1992 (Act 23 of 1992) as amended, notice is hereby given that the Municipal Council of Hentiesbaai, intends to alienate a portion of Hentiesbaai Town and Townlands no.133 (called Tulongeni Garden), measuring 5.1331 Hectares (equivalent to 51 331m²) at a cost of N\$ 25.00 /m² amounting to a total purchase price of **N\$ 1 283 275.00** (One million two hundred eighty three thousand two hundred and seventy five Namibian dollar only), by way of private treaty to Messrs Dianne Burger for the purpose of establishing an educational farm school & small-scale urban garden facility.

Further take note that the locality and the layout plan of the property lies open for inspection during office hours at the offices of the Municipal Council situated at the corner of Jakkalsputz Road and Nickey Nyambo Avenue.

Any person(s) having objection(s) to the intended alienation of the portion may lodge such objection(s) fully motivated to the undersigned, within fourteen (14) days after the second placement of the advert.

Chief Executive Officer
P O Box 61
Henties Bay

NOTICE OF ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS

Junior Baiano Industrial Consultants cc hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GSI 30 of 6 February 2012) for the following activity.

Project Title: Charcoal Production
Project Description: Proposed Charcoal production inclusive of the Plant Infrastructure
Project Location: M. Mbelela No. 201 farm, Okahandja district, Otjozondjupa region
Project Coordinates: Latitude Longitude
-21.67747491504997° 18.05568893348694°


Proponent: Kudu Biomass Group (PTY) Ltd

IAPs are invited to register with the consultant and give their comments and concerns in writing. Please take note of the following:

PUBLIC MEETING:
Date: 16 June 2022
Venue: Kataneno No: 106 farm
Time: 15h00

To register or request for documents please submit your name, contact information and interest in the project, in writing to:

Mr Nghyolwa, Fredrich
Tel: +264 (0) 81 147 2029
Email: JuniorB200581@gmail.com




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PUBLIC NOTICE

ESTABLISHMENT OF TOWNSHIP: OTJOMUISE EXTENSION 12

Notice is hereby given in terms of Section 107 of the Urban and Regional Planning Act, 2018 (Act No. 5 of 2018), that HEH Urban Nest Creations has applied to the Windhoek Town Council and intends on applying to the Urban and Regional Planning Board for approval for the proposed Establishment of a Township of Otjomuise Extension 12 in terms of Sections 104 & 105, of the Urban & Regional Act 5 of 2018. Additionally, further alteration or cancellation of General Plan of Portion 304 (a portion of portion b) of the Farm Windhoek Town ad Townlands no.31 in accordance with Section 80 of the Urban and Regional Act 5 of 2018.

Otjomuise Extension 12 will comprise of 166 erven and the Remainder Street, and the main purpose of the township establishment is to create more residential erven in Windhoek, in order for Council to address the continues housing backlog.

The plan for the proposed township lies for inspection on the Town Planning Notice board at the City of Windhoek Customer Care Centre, main municipal offices, Rev. Michael Scott Street, Windhoek and the office of the Ministry of Urban and Rural Development, Division: Planning, second floor, room No. 237, GRN Office Park in Windhoek.

Further take note that any person who wishes to object to the application as set out above may lodge such objection together with their grounds thereof in writing, with the City of Windhoek, directed to the Chief Executive Officer, P.O. Box 59, Windhoek, within 14 days after the publication of this notice, which is scheduled to end on Friday, 3 June 2022. The last date for any objections is: 22 June 2022.

TOWN COUNCIL:
City of Windhoek
P. O. Box 59
Windhoek
Tel: 061 290 2375
Hilma.Hamata@windhoekcc.org.na

APPLICANT:
HEH Urban Nest Creations
P. O. Box 4453
Walvis Bay
Tel: 064 222 075
info@urban-nest-na.com



Namib-Enviro consultant herewith gives notice in terms of the Environmental Management Act, 7 of 2007 and Regulation 21 of the Environmental impact assessment (EIA) for the proposed construction and operation of a filling station at Ohangwena oshikunde(omtwe womnhu).

PROponent: MARYANA PROPERTIES CC

DESCRIPTION OF ACTIVITY: CONSTRUCTION AND OPERATIONS OF A FILLING STATION

LOCATION OF THE AREA: OHANGWENA REGION OSHIKUNDE,(OMTWE WOMNHU)

Interested and Affected parties (I & AP) are invited to register with Namib-Enviro consultants for the proposed construction and infrastructure activities within 14 days of the advertisement.

Registration can be done by requesting of the Background information document provided in the email below. Any persons having any objection to the email below by: 2 June 2022

**Email: namibenviro@gmail.com
Cell: 081-4801644**

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Windhoek

NOTICE FOR ENVIRONMENTAL IMPACT ASSESSMENT

Healthy Earth Environmental Consultants CC (HEEC) hereby gives notice to all potentially interested and Affected Parties (I&APs) that an application will be made to the Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following:

PROJECT NAME: Environmental Impact Assessment (EIA) for the establishment and operation of a borrow pit to obtain raw materials for construction activities at Onashiku shaLaban, Okatana Constituency, Oshana Region.

PROJECTS LOCATION: The proposed borrow pit will be situated at Onashiku shaLaban approximately 7 Km west of Oshakati and about 3 Km west of the C46 main road stretching from Oshakati to Oshikuku within Okatana Constituency, Oshana Region.

PROJECT DESCRIPTION: The project involves conducting an Environmental Impact Assessments (EIA) for establishment and operation of a borrow pit to obtain raw materials for construction activities at Onashiku shaLaban, Okatana Constituency, Oshana Region.

PROJECT INVOLVEMENT:
Proponent: Uukwambi Traditional Authority (UTA)
Environmental Assessment Practitioner (EAP): Healthy Earth Environmental Consultants CC (HEEC)
REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS: In line with Namibia's Environmental Management Act (No. 7 of 2007) and EIA regulations (GN 30 of 6 February 2012), all I&APs are hereby invited to register and submit their comments, concerns or questions in writing via: Email: askheec@gmail.com on or before Friday 17th June 2022.

A public meeting will be held as follows:
Meeting venue: Community Meeting Place, Onashiku shaLaban, Okatana Constituency, Oshana Region
Date: Saturday, 04th June 2022
Time: 10h00 a.m
Contact: +264 81 572 0258



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