

**PROJECT NAME**

Development and Operation of a New Fuel Service Station  
- Erf 1206, Outapi Townlands, Omusati Region

**ENVIRONMENTAL MANAGEMENT PLAN  
(EMP)**

**REPORT STATUS**

Final

**ECC APPLICATION NUMBER**

APP-003114

**PROJECT PROMOTER**

**SFACFT Property (Pty) Ltd**

Contact Names: Mr Lisias Shilongo

Designation: Managing Director

Cell: 081 127 8287

Cell: 081 869 3949

Email: [kukeinge69@gmail.com](mailto:kukeinge69@gmail.com)

Physical Address: Erf 226, Outapi

Postal Address: Box 1447, Outapi

**PREPARED BY**

**Ekwao Consulting**

4350 Lommel Street, Ongwediva

Cell: 081 418 3125

Fax2Mail: 088645026

Email: [ekwao@iway.na](mailto:ekwao@iway.na)

Report Date: November 2021

## ABBREVIATIONS AND ACRONYMS

---

<b>BAT</b>	Best Available Technology
<b>BID</b>	Background Information Document
<b>BSR</b>	Baseline Scoping Report
<b>CBD</b>	Central Business District
<b>CO</b>	Carbon Monoxide
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>COVID-19</b>	'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.'
<b>EIA</b>	Environmental Impact Assessment
<b>EMP</b>	Environmental Management Plan
<b>GRN</b>	Government of the Republic of Namibia
<b>HES</b>	Health Environmental and Safety
<b>HPP</b>	The Harambee Prosperity Plan
<b>IAPs</b>	Interested and Affected Parties
<b>ISO</b>	International Organization for Standardization
<b>M<sup>2</sup></b>	Square meters
<b>MEFT</b>	Ministry of Environment, Forestry and Tourism
<b>MME</b>	Ministry of Mines and Energy
<b>NAAQS</b>	National Ambient Air Quality Standards
<b>NHC</b>	National Heritage Council
<b>NO<sub>2</sub></b>	Nitrogen Dioxide
<b>NSI</b>	Namibia Standards Institute
<b>OTC</b>	Outapi Town Council
<b>PM</b>	Particulate Matter
<b>PPE</b>	Personal Protective Equipment
<b>PPP</b>	Public Participation Process
<b>SABS</b>	South African Bureau of Standards
<b>SHE</b>	Safety, Health & Environment
<b>SO<sub>2</sub></b>	Sulphur Dioxide
<b>Road Abbreviations</b>	
<b>C46</b>	The route name for the highway starting from B1 at Ondangwa to Ruacana via Oshakati and Outapi
<b>D3608</b>	The route name for the district road starting from B1 in the Ohangwena Region to Outapi via the Settlements of Engela, Ongenga and Okalongo

---

## TABLE OF CONTENTS

---

SECTION	DESCRIPTION	PAGE
1.0	<b>Environmental Management Plan</b>	2
1.1	Introduction	2
1.2	Purpose of the EMP	2
1.3	Acceptance of the EMP	2
1.4	Environmental Policy	2
1.5	Environmental Objectives	3
1.6	Site Documentation	3
1.7	Emergency Numbers	3
1.8	Monitoring, Reporting & Auditing	3
2.0	<b>Environmental Awareness Plan</b>	4
3.0	<b>The Organisational Structure</b>	4
3.1	The Developer/Promoter	4
3.2	The Contractor	4
3.3	Health and Safety Officer of Omuthiya Town Council	5
4.0	<b>EMP Procedures and Framework</b>	5
4.1	Construction Phase	6
4.2	Operational Phase	6

### TABLES

<b>Table 1</b>	Section A - EMP Pre-Construction Phase	7
<b>Table 2</b>	Section B - EMP Construction Phase	14
<b>Table 3</b>	Section C - EMP Post Construction Phase	19
<b>Table 4</b>	Section D - EMP Operational Phase	20

### ANNEXURES

<b>Annex 1</b>	Letter of Intent from MME
<b>Annex 2</b>	Expression of Interests – VIVO Energy Namibia
<b>Annex 3</b>	Deed of Transfer

## 1. SCOPING ASSESSMENT REPORT

### 1.1 Introduction

SFACFT Properties (Pty) Ltd ('SFACFT') is planning to construct and to operate a modern fuel service station complimented by facilities that are often associated with such developments and has appointed Ekwao Consulting ('Ekwao') to handle its application for an Environmental Clearance Certificate (ECC) with the Ministry of Environment, Forestry and Tourism (MEFT).

After a Background Information Document (BID) on the envisaged development was prepared and submitted to MEFT, the EIA was allocated the application number of **APP-003114**. Given the size of the envisaged development, and its specific location on formalized and serviced urban land within the jurisdiction of the Outapi Local Authority (OTA), MEFT has set the scope of the EIA to include the following:

- Scoping Report
- Environmental Management Plan (EMP), and
- Public Participation Process (PPP)

This report represents as far as possible the outcome of the Scoping and Environmental Impact Assessment conducted by Ekwao with respect to the proposed development.

### 1.2 Parameters for the Study

In carrying out the Scoping and Environmental Impact Assessment for the proposed development, Ekwao has:

- Critically looked into the location and suitability of the site for the proposed activity.
- Provided a detailed description of the baseline information and listed the national environmental legislative and regulatory frameworks which have bearings on the development.
- Provided detailed descriptions of the potential environmental impacts which the development of the fuel service station will bring to bear to the physical, biological (ecological) and socio-economic aspects.
- Presented an evaluated the technology, procedures and processes to be used in the implementation of the project.
- Conducted a Public Participation Process (PPP) by placing adverts in two local newspapers over two consecutive weeks and erecting a Notice Sign on the site including sending BIDs to key identified stakeholders.
- Formulated an Environmental Management Plan (EMP), outlining the measures to be taken to eliminate and to minimize adverse impacts on the environment during the Construction and Operational Phases of the service station.

### 1.3 Assumptions

SFACFT has been issued with a Letter of Intent (LOI) to initiate the process leading to the construction of its service station in line with the revised guidelines adopted by the Ministry of Mines and Energy (MME) for granting of fuel retail licenses (**Annex 1**). Normally, a LOI is only granted after a comprehensive site viability assessment has been carried out by way of compiling and presenting a bankable business plan to MME for its own evaluation and assessment. It is therefore assumed that the proposed development has met the conditions of MME, i.e. the development is socially desirable and economically feasible.

At the time of conducting the EIA, specific details of the exact design and layout of the filling station were still being prepared by professional service providers and therefore

unavailable for examination by Ekwao. This EIA assessment is therefore based on the information:

- Provided to Ekwao by the promoter.
- Gathered during the site inspection and observation.
- Obtained from secondary sources through desk studies.

It is therefore assumed by Ekwao that a modern filling station is envisaged and will be developed by SFACFT.

SFACFT has not concluded franchise terms with any specific local fuel providers yet, however, Shell Namibia has expressed a firm interest to partnering with SFACFT (**see Annex 2**). Shell Namibia has one active fuel outlet in the town of Outapi, and, in this EIA, an assumption has been made that Shell Namibia will be franchisor.

#### 1.4 **Approach to the Study**

Ekwao has adopted an investigative approach which took into account the existing environment and the possible impacts which the envisaged fuel service station will have on the physical and socio-economic environments. The assessment was made by way of:

- Physical observations.
- Visual surveying.
- Taking of photographic images.
- Talking to the proponent and the residents in the immediate vicinity of the development.
- Ascertaining the views and opinions of senior officials in the management of OTA who are responsible for the portfolio of Economic Development and Environmental Health & Safety.

A description of the property (land) has been provided and its location assessed for suitability to the proposed development. Additionally, the national legislations, policies and guidelines applicable to the planned development have been highlighted.

Mitigation measures for identified impacts were considered over the two phases of the development which are:

- The Construction Phase which includes the pre-construction, construction and post construction activities, and
- The Operational Phase which entails the day-to-day operational activities of the development.

Mechanism for monitoring and evaluation of compliance were proposed and included in the EMP.

Finally, a Public Participation Process (PPP) as required by the Environmental Management Act was conducted within the constraints imposed by the prevailing Covid-19 pandemic. In this regard, face to face contact was avoided and Interested and Affected Parties (IAPs) invited to submit their concerns and or inputs in writing to the EIA Consultant.

## 2. DESCRIPTION OF THE DEVELOPMENT

### 2.1 Project Promoter

The envisaged development is promoted by SFACFT Property Pty Ltd – a 100% Namibia owned and managed company. Details of the lead promoter are as provided on the project information sheet. Erf 1206 is currently registered in the name of one of the shareholders of SFACFT (**Annex 3**) and the process is underway to have the land ownership vested in SFACFT.

### 2.2 Project Location

The piece of land earmarked for the development is Erf 1206 situated in the townlands of Outapi Town Council and measuring about 13 509 m<sup>2</sup>. The site is along C46 more or less where D3608 intersects C46, (**Fig. 12**). The stand is fully formalised with all required services installed and functional. The zoning is business and therefore in line with the planned development.

The footprint for the filling station is expected to cover about 25% or 3 385 m<sup>2</sup> of the total surface land, leaving in excess of 10 000 m<sup>2</sup> of this prime land for the development of other commercial opportunities in the future, i.e. hotel, shopping mall, conference/training facilities, etc.

From a traffic flow perspective, the filling station is adjacent the C46, the busiest national road serving both inbound and outbound traffics. In this respect, the economic viability of the project is therefore not in question.

### 2.3 Existing Infrastructure

#### 2.3.1 Access to the Site

Most traffic will enter the service station from the C46 which is about 50 m away. A suitable access road linking the service station to C46 will have to be developed. Access will also be provided from a street road abutting Erf 1206 to the northwest (**Fig. 3**).

Traffic congestion is quite common in the town of Outapi and can be a source of irritation and annoyance, especially during month ends, when Outapi, which serves as the administrative capital for the Omusati Region, welcomes hundreds of guests, mostly from the surrounding villages, who come to town for shopping, banking and other services.

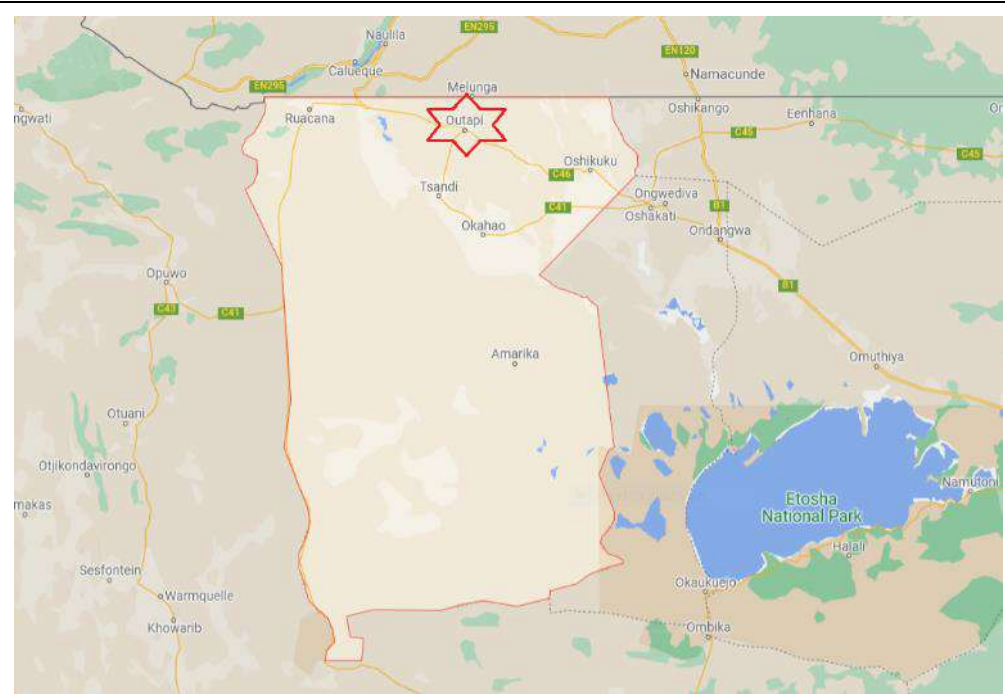
Heavy traffic is more prevalent during the popular Olufuko Cultural Festival held annually in September, the Easter long weekends and December holidays. Traffic congestion should therefore be expected as a result of vehicles slowing down to turn to and those leaving the service station entering C46. This problem is likely to prevail in Outapi until the section of C46 passing through the town is converted into a dual carriageway road.

#### 2.3.2 Water Supply

The stand is fully serviced and supplied with potable water and sewerage line by OTA. A water fire hydrant point was also observed on the plot. The water requirement for the development, both during the Construction and Operational Phases is not expected to impact negatively on the existing water supply at the town. Generally, water is a scarce resource in Namibia and must be used sparingly.

Harvesting of rainwater from rooftops should be considered to supplement potable water supplied by Council. Such water can be used for cleaning purposes and watering of plants around the facility. Recycling of water used at the car wash facility should also be considered.





**Figure 1: Project Location – Regional Context**



**Figure 2: Project Location – Townlands Layout Context**



**Figure 3: Project Location – Accessibility Context**

### 2.3.3 Electricity Supply

Electricity is available on site. The local electricity supplier is Nored. The existing power supply is sufficient to cater for the proposed development. In the long term, solar panels installed on the rooftops of the buildings can supplement the energy requirements of the filling station. This will reduce the energy bill of the service station considerably. Private investors have successfully installed and commissioned a 5MW photovoltaic solar power in the town of Outapi, augmenting the power supply sourced from Nored. Overall, the energy requirement for the project is not expected to have any negative impact on the current electricity demands in the town.

### 2.3.4 Sewerage System

The site is linked to the sewerage system. As standard practice, the number of toilets and or ablution facilities required for the fuel retail service station has to be indicated on the drawings which have to be submitted to the local authority for assessment and approval.

### 2.3.5 Site Surface Drainage

The site has a gentle fall to the southeast and during the rainy season most of the rainwater is expected to drain in this direction. The C46 to the east of the site (**Fig. 5**) is slightly elevated such that rainwater from the tarmac surface will drain towards the filling station.

Generally, the town of Outapi is prone to flooding as a result of it being developed between two prominent dry watercourses (*Oshanas*). A suitable drainage system has therefore to be provided for, in the design phase of the project in order to divert surface run-off and storm water from the site during the operational phase.

The photographs in this report were taken two days after a slight downpour of approximately 45 mm fell in the town of Outapi over seven days in November 2021 and helps to stress the importance of having a proper drainage system drawn up to handle drainage and surface water runoff (**Figures 5 & 6**).

### 2.3.6 Waste Handling

All wastes (solid and liquid) have to be handled as provided for in the Environmental Management Plan (EMP) section of the EIA. Suitable waste skips have to be provided, emptied and cleaned in line with the bylaws of the OTC. The entire project site was dotted with unsightly windblown papers and plastics making the surroundings a visual nuisance.





**Figure 4:** View Looking Northwest. (Note Street Road Providing Alternative Access to the Site)



**Figure 5:** View Looking Eastwards. Note Standing Water and Level of the C46 East of the Site.





**Figure 6:** View Looking slightly Northeast



**Figure 7:** View Looking slightly Southeast





**Figure 8:** View Looking Slightly Southwest



**Figure 9:** View Looking directly to the West



**Figure 10:** View around the middle of Erf 1206



**Fig. 11:** Standing on C46 Looking South



**Fig. 12:** At the Intersection of D3608 and C46



**Fig. 13:** Looking towards D3608



**Fig. 14:** On C46 looking to northwest towards Ruacana



## 2.4 Details of the Proposed Activity

The study area consists of a site measuring  $\pm 13\,509\text{ m}^2$  as shown in **Figures 2 & 3**. The proposed development will entail the construction of a fuel service station integrated with what have become standard facilities at modern fuel retail service stations.

- canopied forecourt housing fuel pumps;
- convenience store and take-away;
- related administrative offices;
- banking automatic teller machines (ATMs);
- a tyre repair workshop;
- a car wash;
- ablution facilities;
- truck stop,
- long distance bus terminal, and
- adequate paved parking bays.

At the time of the EIA assessment, specific details of the exact design and layout of the proposed filling station were unavailable, as the entire project is still in the concept design phase. However, considering the details presented by the proponent, a modern filling station is envisaged.

Typically, such filling station will make provision for underground storage of unleaded petrol and diesel. The typical tank allocation is on a four storage tank facility, using two tanks for the storage of petrol and two tanks for the storage of diesel. However, this is depended on the anticipated sales volume for each fuel product.

A modern filling station will have a canopied forecourt with three or four dispensing islands on which pumps for the dispensing of fuel from the underground storage tanks are located. The standard industry practice is for the area under the canopy to be slightly raised above the level of the remainder of the service area and sealed with an impervious layer.

## 2.5 Local Standards for Fuel Service Stations

Since Namibia is still in the process of developing its own standards, the current standard practice used is that of SABS 089:1999. The installation of the fuel tanks and pipelines at the filling station are to be in line with SABS Standards (SANS 10089: Parts 1-3).

In terms of these standards:

- underground Fuel Storage Tanks (USTs) should be a minimum composite tanks fiber-reinforced resin coated steel tanks;
- installation requirements for USTs as prescribed in terms of the SABS codes;
- filler point containment measures for the containment of spillage during tank filling as prescribed in terms of the SABS codes; and
- supply pipeline types, containment measures and installation requirements are specified.

The tanks are filled from a common filler. The filler point is surrounded by secondary sleeving to prevent surface water and soil from entering the filler box. The fuel tanker operator will pump out any spillage into this filler box at the time of fuel delivery.

From these tanks, fuel is pumped through underground pipelines, which are laid to the forecourt area, where it is finally dispersed into customers' vehicles. Dispensing pumps will be fitted with emergency cut off valve as per legislation and standards.

All storm water that may potentially be contaminated by fuel or oil spills is directed to a separator unit prior to exiting the site. In addition, waste water from the carwash facility is drained through a separator before discharging such waste water into the sewerage system of town council.

## 2.6 **Consideration for Project Alternatives**

Alternatives to this proposed development have been assessed from the environmental and socio-economic perspectives. The alternative considered were:

- Alternative Site Scenario;
- No Action Alternative/Scenario; and
- Comparisons of Alternatives.

### 2.6.1 **The Alternative Site Option**

The proponent has been granted a LOI by the line ministry for this specific site. The relocation option to a different site was therefore not explored and assessed by Ekwaio in any great measures. The reason for this was that the selection of a site intended for use as a fuel retail service station, is made based on evaluations of a number of factors: such as traffic volumes, site accessibilities, availability of services (water, electricity, sewerage, waste disposal,) etc.

The promoter has already purchased and owns the specific land based on its strategic location for the intended purpose. As such there are no alternative sites available to the promoter for the proposed development.

The land is located within the Townlands of OTC and has been formalized, fully serviced and zoned for business. It is also big enough to accommodate the scale and size of development planned by the promoter including future expansions.

It is common knowledge that serviced land for development of businesses, construction of housing and industries is in limited supply from almost all local authorities throughout the country. For the developer to look for an alternative site, will be a cumbersome process and there is no guarantee that any such site will be successfully secured.

The promoter has already made substantial initial investments to buy the land. Designs for the service station are currently being drawn up for submission to MME and to the local authority. An alternative site would result in the loss for the funds already paid to professional service providers such as Architect, Structural Engineer and Quantity Surveyors.

In consideration of the above concerns and assessment of the current site, the option for an alternative site is not a feasible proposition at this stage.

### 2.6.2 **The 'No Action' Alternative**

The 'No-action Alternative' in respect to the proposed project implies that the status quo is maintained. This option is the most suitable alternative from an extreme environmental perspective, because it ensures non-interference with the existing conditions. However, the need for such a development is high and the anticipated insignificance environmental impacts resulting from the Construction Phase have already been experienced (the site is in a built up area).

However, this option will involve several losses, both to the project proponent, OTA, (no payment for services/rates), the Namibian community at large (no employment) and Central Government in that no tax will be paid to the State coffers.

The land which is zoned for business will remain undeveloped and under-utilized or neglected. The 'no project' option is the least preferred option from the socio-economic,



and partly environmental perspective because, if the project is not done:

- The economic benefits especially during the Construction Phase, i.e. provision of jobs for skilled and non-skilled workers will not be realised.
- There will be no generation of income by the developer and the local authority (Outapi Town Council) will not be paid for the provision of rates and taxes.
- The social-economic status of Namibia and the local people would remain unchanged.
- The available local skills would remain underutilised.
- No employment opportunities will be created for Namibians who will otherwise work at the fuel retail service station after the construction has been successfully completed.
- The scenario of no-action clearly sends out a negative vibe and discourages investors both local and foreign from pursuing economic opportunities in the local oil industry.

From the above explanations, it is obvious that the 'No Project Alternative' is not a desirable alternative from the socio-economic perspectives, since no benefits will accrue to anyone, including the promoter, the local authority, the youths roaming around the streets looking for employment and central Government (no taxes, etc.).

However, from the environment conservation perspective, the 'No Action Alternative' will be beneficial in that any potential negative impacts associated with the project implementation will be avoided.

The "No Action Alternative" should not be adopted, as there is a fundamental need to encourage sustainable development as long as such developments are conducted in line with the provisions of the Environmental Management Act and abiding by the provisions outlined in the Environmental Management Plan (EMP) for such a development.

### 2.6.3 **Comparing of Alternatives**

Under the 'Development Alternative/Scenario' the proposed development would provide direct and indirect employment to the local people. During the Construction Phase, jobs will be provided to the construction workers in trades such as bricklayers, plasters, joiners, electricians, pavers, carpenters, plumbers, etc.

The Construction Phase will be followed by the Operational Phase (business phase) in which jobs in the form of fuel jockeys, shop attendants, cleaners, security/guards, cashiers, etc. will be provided. Employees will be drawn from the local community, hence combating the scourge of unemployment.

In the event of a 'No Action Alternative/Scenario' development will not take place. There would be no benefit derived from the site and nor would there be the insignificant environmental impacts.

Provided the environmental impact mitigation measures as proposed in the EMP are adhered to, the development will have minimal negative to insignificant impacts to the environment.

### 3. THE LEGAL AND POLICY FRAMEWORKS

To protect the environment and achieve sustainable development, the implementation of all projects, programs and policies deemed to have adverse impacts on the environment are required to have been preceded by an EIA, conducted in accordance with the Namibian legislation. Listed in the Table below are the legislations that govern the EIA process in Namibia, pertaining to the proposed activity:

<b>TABLE 1: NATIONAL LEGISLATIONS</b>
<b><i>The Environmental Management Act, Act No. 7 of 2007</i></b>
The Environmental Impact Assessments (EIA) is regulated by the Ministry of Environment and Tourism (MET) in terms of the Environmental Management Act, (Act No. 7 of 2007). This Act was gazetted in December 2007 (Government Gazette No. 3966) and the Environmental Impact Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) were promulgated in February 2012.
<b><i>The Local Authority Act, (Act No.23 of 1992)</i></b>
The Act provides for the establishment of local authorities which run formal establishments such as towns, villages and settlements. The Outapi Town Council was established under the Local Authority Act.
<b><i>Water Resource Management Act (Act No. 11 of 2013)</i></b>
The line ministry is the Ministry of Agriculture, Water and Forestry. This Act provides for the management, protection, development, use and conservation of water resources; to provide for the regulation and monitoring of water services and to provide for incidental matters.
<b><i>Road Fund Administration Act (Act 18 of 1999)</i></b>
Regulates traffic and use of public roads in Namibia including aspects related to road safety, vehicle licensing, roadworthiness, Mass Distance Charges, abnormal loads, etc.
<b><i>Atmospheric Pollution Prevention Act (Act No. 45 of 1965)</i></b>
This Act was enacted in 1965 is still being applied in independent Namibia today and resorts under the Ministry of Health and Social Services. The Act attempts to guard against the pollution of the atmosphere. A number of sections of this Act relate to 'Air Pollution Control Certification', dust control, closure certificate, etc. At present, the Ministry does not grant any certificates as no procedures or guidelines exist. The best practice would be to notify the Ministry of the anticipated emissions.
<b><i>National Heritage Council Act (Act No. 27 of 2004)</i></b>
The line ministry is Ministry of Youth, Sport and Culture. The National Heritage Council Act provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects. It also makes provision for archaeological 'impact assessments'. Part V: Permits, paragraphs 51 and 52). If applicable, the relevant permits must be obtained before disturbing or destroying a heritage site as set out in the Act.
<b><i>Atomic Energy and radiation Protection Act (Act No. 5 of 2005)</i></b>
The Hazardous Substance Ordinance No. 14 of 1974 was repealed and amended by the Atomic Energy and Radiation Protection Act. The Act provides for the control of substances which may cause injury or ill-health or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitising or flammable nature. Whilst the environmental aspects are not really explicitly stated, the Act provides guidelines with respect to importing, handling and storage, etc. of hazardous substances. The line ministry is the Ministry of Police, Safety and Security (the Drag Law Enforcement Unit).
<b><i>Regional Council Act (Act No. 23 of 1992)</i></b>
The Act resorts under the Ministry of Urban and Rural Development and was enacted to promote the planning and coordination of policies at the regional. Under Article 28, the powers, duties, functions, rights and obligations of regional councils include overseeing the general implementation of regional development activities.
<b><i>The Labour Reform Act (Act No. 11 of 2007)</i></b>
Overseen by the Ministry of Labour, the Labour Act as amended aims to "promote and maintain the welfare of the people and ... to further a policy of labour relations conducive to economic growth, stability and productivity". It details basic conditions of employment, and health, safety and welfare requirements of employers.
<b><i>The Petroleum Products &amp; Energy Act (Act No.13 of 1990)</i></b>
The Act makes provision for the procurement, handling and storage of petroleum products. The line ministry is the Ministry of Mines and Energy.

**TABLE 2: NATIONAL POLICIES AND RELATED PROGRAMME**

**The Environmental Policy of Namibia**

The Environmental Assessment Policy requires that all projects initiated by both the government and private sector that have a detrimental effect on the environment must be accompanied by an EIA. It further provides a guideline list of all activities that require an impact assessment. The proposed activity is listed as an operation requiring an impact assessment.

**Vision 2030 and National Development Plans (NDPs)**

Vision 2030 states that: "The nation shall develop its natural capital for the benefit of its social, economic and ecological well-being by adopting strategies that: promote the sustainable, equitable and efficient use of natural resources; maximize Namibia's comparative advantages; and reduce all inappropriate use of resources. However, natural resources alone cannot sustain Namibia's long-term development, and the nation must diversify its economy and livelihood strategies.

**The Harambee Prosperity plan (HPP)**

The HPP was launched by President Geingob in March 2015 as a targeted Action Plan to accelerate development in key defined priority areas, which lay the basis for attaining prosperity for all in Namibia.

The Plan does not replace, but complements the long-term goal of the National Development Plans [NDPs] and Vision 2030. HPP introduces an element of flexibility in the Namibian planning system by fast tracking development in areas where progress is insufficient. It also incorporates new development opportunities and aims to address challenges that have emerged after the formulation of NDPs.

**COVID-19 Guidelines and Regulations**

In the wake of the deadly Covid-19 pandemic, the Government of the Republic of Namibia has put in place measures to contain the spread of the virus. Such measures have included lockdowns of certain regions/towns, shut down of schools, banning of religious gathering, limiting numbers of people attending weddings & funerals and or meetings and restrictions of movements of people. The borders have also remained closed for tourists.

**4. THE RECEIVING ENVIRONMENT**

**4.1 Introduction**

With respect to the receiving environment, the impacts which the envisaged development is likely to pose have been evaluated as described in this section. The study information was gathered through a number of sources such as:

- visual investigation of the site;
- discussions with the proponent;
- taking of photographs;
- discussions with local authority officials;
- observation of the current environmental status of the immediate surrounds; and
- secondary information sources from desk studies.

Only those elements of the environment that have a direct bearing on the impact assessment process of the proposed development are discussed. The severity of the potential impacts is largely determined by the state of the receiving environment.

**4.2 Site Access**

Access to the site is as described in section 2.3.1 above and is not repeated here.

**4.3 Topography**

The topography of the area is generally flat with contours indicating a slope of less than 1:100 m. At the altitude of 1135 m above mean sea level, the town of Outapi is sandwiched between two prominent watercourses or rainwater drain channels (locally called 'oshana') of the Cuvelai drainage system. One channel runs to the west of the town whilst another one runs to the east of the town. In recent years, the town of Outapi has experienced flooding from these water channels during the rainy season, due to the terrain being extremely flat.

Depending on the location of the site, the drainage is naturally in the direction of the nearest *Oshana*. In the case of Erf 1206, the natural drainage will flow towards the east.

Generally, the topographical characteristic of the site is not expected to have any detrimental effect on its developmental potential. Both watercourses are dry for the most part of the year, however, it is advisable to take precaution and to provide for an appropriate drainage system in the design phase of the development, in order to divert surface run-off water from C46 which is slightly elevated from any possible flooding.

#### 4.4 Climatic Data

Climatological data for the project site were sourced from the 'Weather Spark'. During the wet season, Outapi is mostly cloudy but generally clear and hot all year around. On average the project site receives between 300 mm and 450 mm of rain per annum with most precipitation occurring between November and March each year.

Daily maximum and minimum temperatures would range between the highest of 35°C and lowest of 17°C respectively. During winter, night temperature could drop as low as 3°C.

The average sunshine per season is 1 382 hours. The benefit of sunshine hours is that the use of alternative energy supply such as solar energy can be applied. With these amounts of sunshine hours, the project could install solar panels and effectively supplement the expensive energy that it sources from Nored thereby reducing its energy bill and passing the benefits on to its customers. A 5MW photovoltaic solar power plant has been successfully installed in the town of Outapi.

#### 4.5 Geology and Soil Characteristics

In terms of the regional geology, the 'Owambo basin' is a sedimentary basin which sits on the Congo Craton and extends from southern Angola into northern Namibia up to the Etosha Pan to the south. The basin is believed to have formed between 530 and 540 million years ago. The youngest sediments in the basin are from the Kalahari Formation and are believed to have accumulated about 100 million years ago.

At the local level, the geology of Outapi is characterized by young sediments of the Kalahari Formation, predominantly comprising of clayey silts, sands and gravel, often underlain by well compacted silcrete and calcrete. Medium grained semi-consolidated sands are encountered at shallow depths, often occurring in bands from 100 cm to 300 cm thick which could be slightly pyritic.

There is no known geological faulting in the area. From the development perspective, the natural soil structure is strong enough to support any top structures which may be erected, as long as the concrete strength recommended for the foundation is adhered to.

#### 4.6 Hydrology

Other than watercourses to the west and east of Outapi which carry rainwater during the raining period, and the open water canal to the south and approximately 1 500 m from the project site, there are no permanent waterbodies such as river, streams, ponds, springs, lakes or dams observed in the vicinity of the project site.

#### 4.7 Waste Management

The development of a fuel retail service station will generate waste both liquid and solid which have to be properly managed. Waste skips for solid wastes generated by the filling station have to be provided and a waste management procedure developed and strictly enforced.

Collection and emptying of waste skips is done by OTC. In fact, Council will only give a Certificate of Fitness to the fuel retail service station once satisfied that all bylaws have been complied with.

#### **4.8 Dust Impacts**

Dust is only expected during the Construction Phase. During the spring months, southern and southwestern winds are quite prevalent at Outapi, often blowing up dust and limiting visibility, albeit for short duration. Other than the occasional wind-driven dust, little dust should be expected during the Operational Phase. Most of the surface areas have to be interlocked and neatly paved to maintain a higher standard of cleanliness.

#### **4.9 Air Quality**

Construction activities for the service station are likely to be associated with some generation of noxious gases emissions from construction vehicles and equipment used during that time. These have the potential to negatively impact the ambient air quality. The impact is however of a short duration (construction) and not expected during the operational phase of the service station.

#### **4.10 Noise Impacts**

The site is located in the Central Business District (CBD) of Outapi where a range of business activities are conducted generating significant levels of noise, impacting on the ambient noise levels of the town, especially during the day. The filling station is adjacent the busiest C46 highway used by many vehicles, virtually on a 24/7 basis. The development will therefore not impact negatively on the noise level in the area.

#### **4.11 Visual Impacts**

By their nature, service stations are usually lit at night which could be a nuisance to sensitive receptors; however, the development is in the CBD with street lighting at night. Generally, the visual aspects of the area has also been altered by several man-made structures in the form of advertising billboards, overhead power lines, telephone lines and MTC towers.

The development is therefore expected to blend in well with the existing structures and infrastructure in the surrounds without compromising the general visual character of the area.

#### **4.12 Archaeological & Cultural Heritages**

Based on a number of EIA studies conducted for a number of Outapi township layouts, the site does not have any known items of archaeological interest or of cultural heritages. In the unlikely event of such sites (artifacts, stone tools, pottery vessels, metal objects, weapons, human bones etc.) being unearthed during the construction activities, the procedure as recommended in the EMP must be followed. Work must be stopped and officials from the National Heritage Council notified about the findings and invited to the site. Work should only proceed once an 'all clear' has been granted by NHC.

#### **4.13 The Ecosystem**

The site is in a buildup area and therefore the ecosystem has been completely altered by past human activities. Big trees have been preserved and not chopped down as can be seen figures. Livestock mostly cattle and goats are encountered within the town boundaries, looking for grazing and are often observed eating papers and plastics.

#### **4.14 The Socio-Economic Environment**

Unemployment is a serious problem in Namibia particularly amongst the youth. There are limited economic opportunities in many towns in the northern regions of the country where



the majority of the Namibian population resides. The proposed development will create employment opportunities during its construction and operational phases.

It is projected that a minimum of 40 people will be employed during the construction phase which will take about eight (8) months. The number of employment opportunities created during the operational phase of the development is projected to peak at 30 once all related commercial activities have been established and operational.



**Fig. 15:** Flooded business parking area in Outapi



**Fig. 16:** Outapi Street Roads Flooded



**Fig. 17:** 'Oshana' northwest of Outapi flooding out



**Fig. 18:** Cultural dance during the Olufuko Festival



**Fig. 19:** Baobab and Palm trees are quite common in Outapi and the surrounds



## 5. IMPACT ASSESSMENT METHODOLOGY

The objective for the assessment of impacts, is to identify and to assess all those possible impacts that are likely to arise from the implementation of the proposed development. Such impacts and the suggested mitigation measures are presented to MEFT so as to allow the authority to make an informed decision on whether the proposed activity should be:

- authorized;
- authorized with conditions; and or
- entirely rejected and refused.

In this sense, impacts are defined as changes in an environmental parameter that results from undertaking an activity. These changes are the difference between effects on an environmental parameter where the activity is undertaken compared to where the activity is not undertaken, and occur over a specific period and within a defined area (*EMA 2007*).

### 5.1 Types of Impacts

Different types of impacts could occur from the proposed development, which could be positive or negative, and can be categorised as being direct (primary), indirect (*secondary*) or cumulative impacts.

Direct impacts are those caused directly by the activity and generally occur at the same time and at the place of the activity (for example, dust generated as a result of excavation for building foundations).

Such impacts are often associated with the construction, operation and maintenance of the development or activity and are therefore obvious and quantifiable. However, indirect impacts are induced changes that may occur as a result of the activity (development). Cumulative impacts can occur from the collective impacts of individual minor actions over a period of time and can include both direct and indirect impacts.

### 5.2 Identification of Impacts

The identification of potential impacts associated with an activity on the environment should include impacts that may occur during the Construction, Operational and Decommissioning Phases of such an activity. Included in the process of identification and assessment of impacts are, inter alia, the following:

- Determining current environmental conditions in sufficient detail so that there is a baseline against which impacts are identified and measured.
- Determining future changes to the environment that will occur if the proposed activity does indeed take place.
- Understanding the activity in great details so as to understand all consequences associated with such an activity.

### 5.3 Mitigation of Impacts

Once impacts have been identified or predicted for a particular activity, appropriate mitigation measures have to be established. Mitigation measures are the modification of certain activities in such a way so as to reduce the impacts on the environment. The objectives of mitigation measures are:

- To find more environmentally sound ways of doing things.
- To enhance the environmental benefits of a proposed activity.
- To avoid, minimize or remedy negative impacts associated with the activity.
- To ensure that residual negative impacts are within acceptable levels

When mitigation measures are considered for certain impacts, they are organized in a hierarchy of actions, namely:

- Avoid negative impacts through the use of preventatives.
- Minimize or reduce negative impacts to 'as low a level as practicable'.
- Remedy or compensate for negative residual impacts that are unavoidable, and cannot be reduced further.

The methodology used to assess identified impacts is as follows:

The <b>Status</b> of the Impact	
Status	Description
Positive:	A benefit on the environment
Neutral:	No impact on the environment
Negative:	A cost on the environment

The <b>Duration</b> of the Impact		
Duration	Description	Score
Short term	Less than 2 years	2
Medium term	3 to 5 years	3
Long term	6 to 10 years	4
Permanent	10 years and longer	5

The <b>Extent</b> of the Impact		
Extent	Description	Score
Site specific	Within the site boundary	1
Local	Affects immediate surrounds	2
Constituency	Extend beyond site boundary	3
Regional	Extend beyond local jurisdiction	4
National	Affects countrywide	5

The <b>Reversibility</b> of the Impact		
Reversibility	Description	Score
Completely Reversible	Reverses with minimal rehabilitation	1
Reversible	Requires mitigation and rehabilitation to ensure reversibility	3
Irreversible	Cannot be rehabilitated completely/ rehabilitation not viable	5

The <b>Affect (Severity or Beneficiary)</b> of the Impact		
Severe/Beneficiary Affect	Description	Score
Slight	Little effect/negligible disturbance	1
Slight to Moderate	Effects observable – environmental impacts reversible with time	2
Moderate	Effects observable – environmental impacts reversible with rehabilitation	3
Moderate to High	Extensive effects – irreversible alterations to the environment	4
High	Extensive permanent effects with irreversible alterations	5

The <b>Probability</b> of the Impact occurring		
Rating	Description	Score
Unlikely	≤15% sure of an impact occurring	1
Possible	≥15% ≤ 40% sure of an impact occurring	2
Probable	≥40% ≤60% sure that an impact will occur	3
Highly Probable	≥60% ≤85% sure that an impact will occur	4
Definite	≥85% sure that an impact will occur	5

The **Consequence**  
= Duration + Extent + Reversibility + Severity

The **Significance Rating (S)**  
= Consequence x Probability

The <b>Significance Rating</b>	
Rating	Description
S ≤ 25 - <b>Low Impact</b>	The impact will not have a direct influence on the decision to the development
S ≥ 25 ≤ 50 - <b>Medium Impact</b>	The impact will influence the decision to the development unless it is effectively mitigated
S ≥ 50 – <b>High Impact</b>	The impact will have an influence on the decision process to the development irrespective of the mitigation measures proposed

## 6. IMPACTS AND MITIGATION MEASURES

In the section below, all possible impacts associated with the proposed development are discussed in details while possible mitigation measures are described in the EMP section of the EIA document.

### 6.1 POSITIVE IMPACTS

#### 6.1.1 Employment Creation

The filling station proposed by SFACFT will help to combat unemployment as new job opportunities will be created during both phases of the development – construction and operational. It is projected that a minimum of fifty (50) employment opportunities will be created during the construction phase followed by another thirty (30) during the operational phase.

#### 6.1.2 Boost to the Local Economy

It is expected that, people from within the town of Outapi will be hired to work at the service station and related business activities. This will contribute to the local economy in that employees will be spending their disposable incomes in the town of Outapi through payment of water, electricity and rates & taxes to local council coffers and buying groceries and clothing from local shops hence boosting the local economy.

During the construction phase, it is expected for the successful contractor to procure construction materials (cement, stones, bricks, brickforce, steel products, roofing, plumbing, tiling, electrical goods, etc.) required from local suppliers.

As noted in the previous section of this report, energy plays a pivotal role in economic growth and development. The development of a filling station at Outapi will help to improve accessibility of petroleum products to the local residents including the hundreds of daily visitors commuting from the neighbouring villages hence boosting the local economy.

### 6.1.3 Imparting of New Skills

New employees will be hired, especially from the youth section of the population. Those employees without previous working experiences have to be couched and given on-the-job training and therefore helping them to acquire useful skills and knowledge to help them throughout their working life.

### 6.1.4 Contribution to the Local and National Economy

As local company, SFACFT is expected to source its petroleum products from fuel suppliers and distributors which pay taxes to the State. In addition, the promoter will also be sourcing merchandise for its convenience shop from other traders and as such, liable for tax payments (PAYE, company income tax, VAT, etc.) and other levies (social security commission, workmen's compensation, etc.) and therefore contributing to the national coffer and to the national economy (transport of fuel to Outapi).

### 6.1.5 Training of Employees

It is imperative that all employees who will be hired to work on this development undergo induction training on the EMP and on all aspects related to the environment, with emphasis placed on how their activities, the materials or products that they use and handle can harm the environment.

All impacts as identified in the scoping assessment and recommended mitigation measures proposed in the EMP section of EIA should be conveyed to the workers during such training session.

The provisions of the EMP should be explained to all workers and any sub-contractors (electricians, artisans, plumbers, bricklayers, etc.) who may be hired by the main contractor. Where possible, translation should be provided for the benefit of those employees with limited understanding of the official language.

All employees who have undergone an environmental awareness induction are expected at the end of such training to be able:

- To define the terms associated with the environment.
- To understand the potential impacts that the project is likely to cause.
- To recognize what waste does to the environment.
- To demonstrate what can be done to help prevent harmful impacts to the environment.

The developer has to ensure that training has been offered prior to the workers starting with construction activities. A copy of the EMP should be provided to the Site Agent/Site Manager and that the content is well understood and conveyed to all employees.

The same training as described above should be offered to all those employees who will be hired and recruited by the promoter for the Operational Phase of the facility.

The nature of the impact is POSITIVE and significance rating is VERY HIGH.

#### **Mitigation**

- Employment should be provided to deserving employees without discrimination on the basis of race, origin, gender or political affiliation.
- People from marginalised communities such as the OvaHimba and the Sun people should also be considered for employment.
- Disabled people should also be considered for suitable vacancies.

### 6.1.6 Socio and Economic Impacts

Unemployment is a serious problem in Namibia particularly among the youths especially in the rural areas where economic activities are rather limited. The proposed development will create employment opportunities during its construction phase and the operational phase. It has been projected that a minimum of 30 people will be employed during the operational phase while the construction period is expected to provide employment opportunities to anything between 50 and 60 people.

The disadvantage which comes with this type of development is that, once the construction activities are observed on site, a large number of jobseekers will flock to the site in search of employment. This has an added disadvantage in that too many unemployed people will:

- Resort to the project site often resulting in the creation of informal accommodation facilities.
- Resort to drinking alcohol and to partake in illicit activities such as crimes, drugs, etc.

## 6.2 NEGATIVE IMPACTS AND MITIGATION MEASURES

### 6.2.1 Traffic Congestion

The proposed fuel service station is adjacent C46 and traffic congestion is expected as described under section 2.3.1 access to the site. However, the new site has the potential to level off traffic congestion at other sites in the town, especially during the festive periods. The cumulative impact is of local extent and of medium intensity with Low Significance,

#### Mitigation:

- Entry and exit points to the filling station should be established and clearly marked.
- Adequate parking for both light and heavy duty vehicles should be provide within the service yard.

### 6.2.2 Sedimentation and Drainage

Construction activities will disturb and loosen the soil structures and this will wash away during intense rainstorms and with storm water runoff. Silt could be deposited in the roads. Measures have to be taken to limit the extent of storm water runoff. Topsoil that has been removed from the construction sites should also be stored up slope so that it is not washed away. The cumulative impact is considered local, definite, low intensity and low impact.

The completed fuel site is expected to have an impervious surface to avoid water infiltration into the ground. Surface water from the paved areas is likely to contain amounts of oils and greases, the design should therefore ensure that used water from sections of the filling station where spills are anticipated, is directed to pass through a properly constructed oil interceptors. This will reduce surface runoff from impacting on the natural environment around the service station.

Lack of a proper site surface drainage will result in water clogging up and accumulating making movements of traffic and people cumbersome. The potential impact associated with surface runoff can be effectively mitigated.

#### Mitigation:

- Ensure an adequate and efficient drainage system is provided in the design.
- Provide adequate oil interceptors.
- Consideration should be given to harvest rainwater from the rooftops for cleaning purposes.

### 6.2.3 Soil Disturbances

The construction will include digging of foundations and levelling off of certain areas. This, unfortunately, will involve some disturbances of the soil profile and associated microbial communities. The flat slope of the land implies that minimal levelling will be needed and thus reduced soil disturbances. The underground tanks will require excavation of pits and the remaining materials not used in backfilling of the pits could be used for levelling and landscaping of the fuel retail station. The impact is NEGATIVE but the footprint is comparatively small.

#### Mitigation:

- Limit excavation activities to construction areas only.
- All foundation to be excavated should be clearly demarcated and the work carefully executed.

### 6.2.4 Waste Generation and Management

Various types of waste are expected to be generated during the construction and operational phases. Waste management has to include the management of both solid and liquid wastes. Suitable waste skips have to be provided in which different types of wastes are stored. Collection of wastes is handled by the local town council (Outapi Town Council).

Litter blown from the project site may accumulate in the surrounding areas resulting in visual nuisance. Sources of waste, anticipated volumes and recommended disposal/mitigation measures are as given in the table below.

TABLE 3: WASTE GENERATION AND MANAGEMENT		
Nature of Waste	Volume	Disposal & Mitigation Measures
<b>Construction Phase</b>		
Excavated soil	Moderate	<ul style="list-style-type: none"> <li>• Use for levelling &amp; landscaping</li> <li>• Comply with the EMP</li> </ul>
Cement bags, paint containers, steel scraps, broken bricks, nails, building rubble	Moderate	<ul style="list-style-type: none"> <li>• Re-use</li> <li>• Sell to waste papers &amp; scarp dealers</li> <li>• Dispose at Town Council landfill sites</li> <li>• Separate waste &amp; place in designated bins</li> <li>• Comply with the EMP</li> </ul>
Timber	Low	Sell for firewood
<b>Operational Phase</b>		
Solid waste : papers, bottles, cans, plastics, etc.	Moderate	<ul style="list-style-type: none"> <li>• Procure adequate waste skips</li> <li>• Discourage littering by patrons</li> <li>• Display prominently 'no waste signs'</li> <li>• Keep premises tidy &amp; clean</li> <li>• Comply with the EMP</li> </ul>
Liquid waste (water, fuel, oil, grease, etc.)	Moderate	<ul style="list-style-type: none"> <li>• Ensure suitable stormwater drainage is designed</li> <li>• Install oil interceptors</li> <li>• Monitor quality of effluent discharged frequently</li> </ul>
Emission from vehicles	Low	<ul style="list-style-type: none"> <li>• Emitted directly into the air</li> <li>• Ensure vehicles are switched off when idle</li> <li>• Comply with the EMP</li> </ul>
<b>Decommissioning Phase</b>		
Metals, i.e. scraps	Low	<ul style="list-style-type: none"> <li>• Sell or re-use</li> <li>• Comply with the EMP</li> </ul>
Equipment	Low	<ul style="list-style-type: none"> <li>• Sell or re-use</li> <li>• Comply with the EMP</li> </ul>
Unused concrete	Low	<ul style="list-style-type: none"> <li>• Use for rehabilitation or re-use</li> <li>• Comply with the EMP</li> </ul>
Soil	Low	<ul style="list-style-type: none"> <li>• Use in rehabilitation of site</li> <li>• Comply with the EMP</li> </ul>



## 6.2.5 Environmental Pollution

Possible environmental pollutions associated with this type of development are listed in the table below which also includes the proposed mitigation measures.

TABLE 4: SOURCES OF ENVIRONMENTAL POLLUTIONS	
Sources	Mitigation Measures
Vehicular emissions	<ul style="list-style-type: none"> <li>• Vehicles to be switched off when stationary.</li> <li>• Ensure the facility is spacious and well aerated.</li> <li>• Ensure rules at the facility are applied and enforced.</li> </ul>
Fuel & oil spills	<ul style="list-style-type: none"> <li>• Ensure employees are well trained.</li> <li>• Fit hoses with quick-acting leak-proof cocks or with approved nozzles</li> <li>• Ensure proper waste collection, handling and disposal</li> </ul>
Lubricant containers and packaging materials	<ul style="list-style-type: none"> <li>• Ensure suitable &amp; adequate waste skips are provided</li> <li>• Encourage proper waste collection, handling &amp; disposal</li> <li>• Ensure employees are well-trained</li> <li>• Comply with the EMP</li> </ul>
Office & shop wastes	<ul style="list-style-type: none"> <li>• Ensure adequate skips for different types of wastes are provided</li> <li>• Ensure proper handling, collection and disposal</li> <li>• Maintain a high standard of housekeeping</li> <li>• Ensure employees are well trained on the EMP</li> </ul>
Waste water	<ul style="list-style-type: none"> <li>• Construct a proper drainage water system</li> <li>• Treat water through oil interceptors before discharging into the environment</li> <li>• Install oil intercepts</li> <li>• Ensure employees are properly trained</li> <li>• Maintain high standard of housekeeping</li> </ul>
Leakages	<ul style="list-style-type: none"> <li>• All underground fuel tanks should satisfy local and international standards</li> <li>• Use only approved fuel tanks and monitor volumes to detect any possible leaks timeously</li> <li>• To prevent any fuel leaks from getting into the environment, the tanks should be properly treated</li> <li>• A layer of clay should be used to encase the tanks during installation</li> <li>• Follow the recommendation provided by the supplier</li> <li>• Ensure adequate training is provided to employees</li> </ul>

## 6.2.6 Noise Impacts

Noise is unwanted/undesirable sound that can affect job performance, safety and health of humans. Psychological effects of noise include annoyance and disruption of concentration. Physical effects include loss of hearing, pain, nausea and interference with communications when the exposure is severe.

The construction activities will involve the use of heavy machinery and other miscellaneous sources of noise for construction site (concrete mixers, trucks delivering construction materials such as bricks, sand, aggregate, etc.). This is not likely to cause any significant degradation of the local environment because it will be limited to the construction site. In addition, the noise levels produced are unlikely to exceed the background levels which will be for a short period of time.

### Mitigation

- Construction activities must be limited to daylight hours only.
- Avoid unnecessary long idle, hooting & revving of construction vehicles.
- Construction vehicles should be well maintained to avoid excessive noise levels.

### 6.2.7 Impacts on the Floral and Faunal Diversity

The proposed development is in a buildup area and as such the biodiversity has been degraded by human activities. The proposed development will completely transform the site and will lead to the complete loss of any habitat of living creatures and vegetation. The nature of the impact is considered to be of medium significance because the site is already in a buildup environment. The cumulative impact is site specific, definitive, low intensity and of low impact.

#### Mitigation

- Give due regard to the protection of the ecosystem.
- Comply with the provisions of the EMP

### 6.2.8 Visual Impacts

The prominent man-made features observed around the project site are communication towers for MTC, Telecom, advertisement boards (billboards) and electrical powerlines. During the construction phase for this specific project, visual intrusion will take the form of overhead cranes, scaffolding and the general traffic at the construction site.

After the construction phase, a tall canopied forecourt structure will remain as a permanent feature intruding on the open view of the horizon. If littering and illegal dumping on the site are not controlled, this could increase the visual impact of the proposed development.

#### Mitigation

- train employees on good housekeeping
- protect amenity values

### 6.2.9 Archaeological and Cultural Heritage

Desk studies and site observation did not reveal any items of known archaeological or areas of heritage and cultural interests on the project site itself or in the vicinity of the development. In the unlikely event of any such items being unearthed during the construction phase, work must be stopped and officials from the National Heritage Council and the Namibia Police summoned to the site. Work should only proceed once an all 'Ok' has been granted by NHC.

#### Mitigation

- give due respect to issues of cultural heritage
- comply with the EMP

### 6.2.10 Fire Risk and Control

Petroleum products present significant risk to the environment due to their inflammable nature. This implies that the proponent must put adequate measures in place to prevent and control possible fire explosions. The nature of impact is NEGATIVE and the significance rating is MEDIUM with mitigation.

#### Mitigation

- ensure the facility is kept clean and free from fire hazards and litters
- naked fire should be avoided – place notice signs prohibiting smoking within the fuel retail service station boundaries
- all electrical installation on the premises should be carried out by qualified and certificated artisans

- install fire control appliances (portable fire extinguisher, both CO<sub>2</sub>, dry powder and water types and sand buckets)
- ensure employees are adequately trained in the use of firefighting devices and conduct regular fire drills at least once a year
- ensure all equipment and tools are regularly serviced and well maintained
- implement leakage detection mechanism
- gas cylinders (if the fuel service will sell LPG) should be kept outside in an open air (not inside a building) and regular leakages checks should be conducted
- observe safety measures (no use of cellphone, avoid smoking, etc. when on the fuel service station)

### 6.2.11 Health and Safety

Safety is of paramount importance in the execution of any project activity. During the Construction and Operational Phases, access to the project site has to be secured and restricted so as to ensure that the health & safety of employees, members of the general public who may visit the premises are protected and safeguarded.

This would include risks associated with operating construction machinery on site, excavating trenches and the installation and/or connection of services (water, sewer & electricity). Neglect to apply applicable industry safety standards could lead to incidents and accidents which are undesirable and often associated with costly consequences.

During the Operational Phase, exhaust emissions from fuel combustion is another safety hazard. Depending on the efficiency of the refinery process, combustion of petrol produces mainly CO<sub>2</sub> (±13%), water (±13%) and Nitrogen (±73%). A very small portion of N is converted to Nitrogen Oxide (NO<sub>x</sub>) and some to Nitrate Hydrocarbons.

Incomplete combustion leads to the production of Carbon Monoxide (CO), Volatile Organic Compounds (VOCs) fuel, Nitrogen Oxides and Lead in thousands of compounds both in gas and particulate phases. VOCs are hazardous to human health, for instances, long exposure to Benzene could lead to cancer (EHC, 2003). NO<sub>x</sub> cause irritation of respiratory track and may exacerbate asthma and may damage blood vessels. Extended exposure to Lead (Pb), could lead to several physiological disorders in man with the most sensitive parts being kidney, blood and the nervous system. The emissions may also contaminate the environment including soil and water.

#### Mitigation

##### CONSTRUCTION PHASE

- Enforce strict safety precautions during the construction. These should include provision of PPEs (overalls, helmets, dust masks, welding shielding/goggles, earmuffs, safety boots, etc.)
- Ensure supervision of works is carried out by competent staff that sees to it that correct materials are procured and used, that proper mixing of elements is adhered to and that a high standard of workmanship is maintained throughout the construction.
- Construction site should be sealed off from non-construction workers and the general public.
- Provide for first aid facilities and emergence response plan
- Provide toilet facilities and suitable change rooms for workers

## OPERATIONAL PHASE

- Ensure that employees undergo regular medical check-ups (at least twice a year)
- Vehicles should be switched off to minimise emissions
- Ensure proper aeration within the premises
- PPEs should be provided to employees and wearing thereof enforced
- Install first aid facilities
- Develop a fire emergence response plan
- Develop an accident response plan
- Provide washroom facilities for the workers

### **6.2.12 Covid-19 Control and Prevention**

This EIA is conducted during the time when the whole world is battling to contain the spread of the deadly SARS CoV-2, the virus that causes Coronavirus Disease 2019 (Covid-19). Depending on the type of work being performed and exposure risk, it is incumbent upon the employers to provide a safe and corona-free working environment and for the employees to comply with the control and prevention measures as stipulated by the Covid provided by the Ministry of Health & Social Services.

#### **Mitigation**

The Covid-19 general guidelines recommended to be applied by the employers, employees and patrons during the two phases of the filling station are:

- Wash your hands frequently with soap and clean water for at least 20 seconds
- Avoiding touching your eyes, nose and mouth with unwashed hands
- Practice social distancing by staying a distance of at least 2 meters from the next person when queuing at the filling station or any other place
- Avoid close contact with people who are sick with Covid-19
- Wear face mask which covers the mouth and nose
- Comply with laws and regulations as announced by the authority from time to time
- Observe and comply with symbols in the figure below:



FIGURE 20: Covid-19 Safety Signs & Symbols

TABLE 5 : SUMMARY OF IMPACT ASSESSMENTS – CONSTRUCTION AND OPERATIONAL PHASES

POTENTIAL IMPACTS		NATURE OF IMPACT	IMPACT SIGNIFICANCE	
			Unmitigated	Mitigated
Construction	Roads & Access to the Site	Negative	Medium	Low
	Training of Employees on Environment	Positive	Low	Medium to High
	Site Surface Drainage	Negative	MEDIUM	Low
	Increased Traffic Around the site	Negative	High	Medium to Low
	Impact on Environmental Pollution	Negative	Low	Low to very Low
	Noise Impacts	Negative	Low	Very Low
	Dust Impacts	Negative	Low	Very Low
	Waste Handling	Negative	Low	Very Low
	Visual Intrusion	Negative	Low	Low
	Archaeological, Heritage & Cultural Aspects	Negative	Low	Very Low
	Impacts on the Ecosystem	Negative	Low	Low
	Fire Risk & Control	Negative	Medium	Low to very Low
	Health & Safety	Negative	Medium	Low
	Socio-economic (Employment)	Positive	High	High
Socio-economic (Social ills: drugs, alcohol )	Negative	Medium	Low	
Operational	Training of Employees on Environment	Positive	Medium	High
	Fire Risk & Control	Negative	Low	Very Low
	Safety & Health	Negative	Low	Very Low
	Site Drainage	Negative	Low	Very Low
	Noise Impact	Negative	Low	Very Low
	Air Quality	Negative	Low	Very Low
	Dust Impact	Negative	Low	Very Low
	Waste Handling	Negative	Medium	Low
	Impact on the Ecosystem	Negative	Low	Very Low
	Visual Intrusion	Negative	Medium	Low
	Socio-economic (Employment)	Positive	High	High
	Socio-economic (social ills: drugs, alcohol)	Negative	Medium	Low
	Socio-economic (on Local Residents)	Positive	Medium	High

## **7. ENVIRONMENTAL ECONOMICS CRITERIA**

### **7.1 Environmental Economic Criteria**

A final qualitative assessment is considered in terms of the criteria used in the field of Environmental Economics. These criteria are explained by Stauth (1983), namely:

- Efficiency Criterion,
- Equity Criterion, and
- Intergenerational Equity Criterion.

### **7.2 Efficiency Criterion**

A project is considered to be efficient if it brings about a net benefit to society. If some people are made better off without anyone else being made worse off, then a project is considered efficient in environmental economics terms.

This project will bring significant economic benefits to the town of Outapi – a town faced with an influx of people emigrating from the rural area to urban area in search of employment opportunities and better living conditions.

The project will create employment opportunities during its Construction and Operational Phases and will further support secondary industries and commercial opportunities in the town and the region through the procurement of goods and services.

### **7.3 Equity Criterion**

The equity criterion relates to the distribution of costs and benefits in the affected society. A project is equitable if it brings about a situation in which the distribution of social well-being is improved.

The envisaged operation will benefit the local people without disadvantaging them in any way. They will not suffer any displacement or loss of land or be subjected to adverse health conditions.

Direct benefits will include remuneration to employees, while indirect benefits would include increased work opportunities in the supporting industries, i.e. transport companies, suppliers of building materials, etc.

### **7.4 The Intergenerational Equity (or Sustainability) Criterion**

This criterion considers the economic impacts on future generations, i.e. it extends the considerations of equity to future generations. Thus a project should be able to make the present generation better off without making future generations worse off. It should be able to provide benefits to future generations without degrading the resource base that the society depends on for its wellbeing. The development proposed by SFACFT Property does not pose any significant threats to human health.

### **7.5 Conclusion and Recommendation**

Overall the economic benefits that accrue from the proposed developed will, by far outweigh the negative impacts on the biological, natural and socio-economic environments. The fuel filling station is expected to perform positively in relation to the efficiency, equity and sustainability criteria.

It is recommended that an Environmental Clearance Certificate (ECC) be granted to SFACFT Property PTY Ltd for its proposed development on Erf 1206 in the town of Outapi.



ANNEX 1

**Letter of Intent from the Ministry of Mines & Energy**



REPUBLIC OF NAMIBIA

MINISTRY OF MINES AND ENERGY

Tel: +264 61 284-8111
Fax: +264 61 238643 / 220386
E-mail: info@mme.gov.na
Website: www.mme.gov.na

6 Aviation Road
Private Bag 13297
WINDHOEK

Enquiries: Codla Tjingovera

13 July 2021

Mr. Lisias Shilongo
SFCFT Property (Pty) Ltd
P O Box 1447
Outapi

Dear Mr. Shilongo

RE: LETTER OF INTENT TO DEVELOP AND OPERATE A SERVICE STATION ON ERF 1206, OUTAPI, OMUSAT REGION.

We hereby acknowledge receipt of your appeal dated the 18 May 2021.

The Ministry has re-assessed and re-evaluated your letter of intent and business plan for constructing a new fuel site On Erf 1206, Outapi, Omusat Region. A thorough baseline study was reconducted, and it concluded that Erf 1206 Outapi. The Ministry believes that there is sufficient market share in Outapi. Therefore, the proposed site is deemed viable and recommended.

We request that you submit, for our approval, three (3) sets of approved technical drawings for the proposed site. We also request that you submit for our endorsement, the application for Environmental Clearance Certificate (ECC).

The viability of the site is valid for six (6) calendar months from the date of this letter. You are, therefore, advised to apply for a fuel retail license in accordance with the Petroleum Products and Energy Regulations, 2000 and the published fuel retail guidelines and requirements, within the validity period.

Kindly take note, that this letter does not guarantee that you will be issued with the fuel retail license necessary to operate the site.

Sincerely,

MINISTRY OF MINES AND ENERGY
OFFICE OF THE MINISTER
TOM K. ALWEENDO, MP
MINISTER
BAG 13297, WINDHOEK
OFFICIAL

NAMIBIAN POLICE
WINDHOEK
29 JUL 2021
CHARGE OFFICE

I certify that this document is a true reproduction/ copy of the original which was examined by me and not altered in any manner.

Handwritten signature and date 26/7

## **ANNEX 2**

**Expression of Interest – VIVO Energy Namibia**



PETROLEUM PRODUCTS REGULATIONS  
APPLICATION FOR RETAIL LICENCE: OUTAPI EXPRESS SERVICE STATION  
**CONFIRMATION: SUPPLYING WHOLESALER**

We, VIVO ENERGY NAMIBIA LTD hereby confirm that we will supply **Mr. Lisias Shilongo - SFACFT (Pty) Ltd** with fuel/or in the event of successful application will be supplying with fuel.

As further required under the regulations, below is a list of all items or assistance we intend to provide in case of a successful application.

**Forecourt:**

3 x Hose Pumps  
2 x 46m<sup>3</sup> (V-Power and Diesel 50ppm)  
Canopy

**Training Support:**

Food safety and standards  
Quality Marshall training  
Product Specialist Training  
HSSE Basic Training



Date: 4/11/2021 Place: WINDHOEK

Signed for and on behalf of

**VIVO ENERGY NAMIBIA LTD**  
**Edward Walugembe**

**Vivo Energy Namibia Ltd**

Vivo House  
333 Sam Nujoma Drive  
Klein Windhoek  
Namibia

P.O. Box 110  
Windhoek  
Namibia

Tel +264 61 270 1111  
Fax +264 61 230 269  
[www.vivoenergy.com](http://www.vivoenergy.com)



## **ANNEX 3**

### **Proof of Ownership – Deed of Transfer**

(Erf 1206 is the process of being transferred from Mrs Johanna Shilongo to SFACFT Property PTY Ltd – Mrs Shilongo is a shareholder of the company)

MAR  
7 FEB 2006

## DEED OF TRANSFER

T 2122 - 2006

JOHANNA KAUNAPAWA SHILONGO

Erf No. 1206 & 1217, OUTAPI  
EXTENSION NO.4

**DR. WEDER, KRUGER & HARTMANN**  
LEGAL PRACTITIONERS, NOTARIES and CONVEYANCERS  
Ground Floor - Nimrod Building - Casino Street

P. O. Box 864 - Tel. 061-275550 - Fax: 238802  
WINDHOEK, Namibia

YSSEE/cr  
Y.0600/3670



PREPARED BY ME  
CONVEYANCER  
YSSEL, E H

DR WEDER KRUGER & HARTMANN  
Attorneys, Notaries and  
Conveyancers  
P O BOX 864  
WINDHOEK

## DEED OF TRANSFER NO

T 2122 - 006

BE IT HEREBY MADE KNOWN:

ANDRE SWANEPOEL

THAT ~~ETIENNE HENNING YSSEL~~  
appeared before me, *deputy*  
said Appearer, being duly authorised thereto by a Power of Attorney granted to him by

Registrar of Deeds at Windhoek, he the

## TOWN COUNCIL OF OUTAPI

Dated the 24 JANUARY 2006 and signed at *OUTAPI*  
~~OSHAKATI~~

*se*

AND THE SAID APPEARER declared that:

WHEREAS the Transferor has on the 24 JANUARY 2006 without any compensation, donated the hereinaftermentioned property to the hereinaftermentioned Transferee, which donation was accepted by the said Transferee on the 24 JANUARY 2006;

AND THAT HE, in his capacity aforesaid, did by these presents, cede and transfer, in full and free property, to and on behalf of

**JOHANNA KAUNAPAWA SHILONGO**

Born on: 7 AUGUST 1954

Married, which marriage does not have the legal consequences of a marriage in community of property in terms of Proclamation 15 of 1928

Her Heirs, Executors, Administrators or Assigns,

1. CERTAIN                      ERF NO. 1206 OUTAPI (EXTENSION NO.4)
- SITUATE                      In the Town of OUTAPI  
Registration Division "A"  
OMUSATI Region
- MEASURING                      13509 (ONE THREE FIVE NIL NINE) Square Metres as indicated on  
General Plan SG No. A.761/2003
- HELD                              by Certificate of Registered Title No. T. <sup>1520/2005</sup>~~2538/1995~~
- SUBJECT                              to the following conditions imposed in terms of Government Notice No.  
90 of 1995, namely:

IN FAVOUR OF THE LOCAL AUTHORITY

- (a) The erf shall only be used or occupied for purposes which are in accordance with, and the use or occupation of the erf shall at all times be subject to, the provisions of the Outapi Town Planning Scheme approved in terms of the Town Planning Ordinance 1954 (Ordinance No. 18 of 1954), as amended.
  
- (b) The building value of the main building, including the outbuildings, to be erected on the erf shall be at least two times the valuation of the erf.

