## ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CONSTRUCTION AND OPERATION OF A PROPOSED FILLING STATION PROJECT AT DRIMIOPSIS, KALAHARI CONSTITUENCY – OMAHEKE REGION



OCTOBER 2022 PREPARED FOR :KATJIRWA BREAD CC PREPARED BY :



Project name	EnvironmentalImpactAssessmentfortheconstruction and operation of a proposed fuel servicestation project atDrimiopsis, Kalahari Constituency– Omaheke region		
Proponent	Katjirua Bread Investment cc		
	P.O. Box 1248		
	Gobabes		
	+264 81 424 2105		
	Katjirua007@gmail.com		
Environmental consultant	Advanced Environmental Agency		
	Continental Building 2 <sup>nd</sup> floor		
	Unit: 206		
	+264 81 760 6590		
	advanced.enviro@yahoo.com		
Authors	Albertina J Simon		
MEFT Application No.			
Approval	Name:		
	Signature:		
Submission date			

#### **EXECUTIVE SUMMARY**

The proponent, Katjirua Bread Investment cc, proposes to develop and operate a service station in Drimiopsis (Farm 1003), Kalahari constituency (Gobabis district), Omaheke region, along the C22 Trans Kalahari Highway road.

The proposed development will result in the development of two fuel storage tanks of which one will be an underground petrol tank and one will be an aboveground diesel tank connected to two dispensing pumps whereby each pump will have two nozzles. The proposed tanks will have a capacity of 26 000 litres of both petrol and diesel, totalling to a combined capacity of fuel storage of 52 000 litres (52 m<sup>3</sup>). The project development will cover a total land area of 22 350 Hectors.

Drimiopsis is regarded as a growth area or Central Business Development of Kalahari constituency. It enclosed Kalahari constituency office, Drimiopsis primary School, Mokganedi Thlabaneb High School, and few retail shops, this implies that most of the people travel to Drimiopsis for basic services. In addition, community members travel long distances of about 45 Km to Gobabis and 121.5 Km to Otjinene to look for filling station. This has open 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.

The planned fuel service station's continuation would result in a number of Listed Activities as defined by the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011). Table 1 below indicate the listed activities induced by the proposed project:

Activity	Applicability to the project
Activity 9.4 Storage and Handling of	Use and storage of dangerous good with a
Dangerous Good	combined volume of more than 30 cubic
- Storage and handling of dangerous	meters.
materials in containers with a	
combined volume of more than 30	

Table 1 Listed activities associated with the proposed project

cubic meters at any site, including gasoline, diesel, liquid petroleum gas, or paraffin.	
Activity 9.5 Storage and handling of	Development/construction of the filling
dangerous goods	station
- Construction of filling stations or any	
other facility for the underground and	
aboveground storage of dangerous	
goods, including petrol, diesel, liquid,	
petroleum, gas or paraffin	
Activity 10.1 (a) Infrastructures	Municipal bulk services installation
- Oil, water, gas and petrochemical and	
other bulk supply pipelines;	
Activity 10.1 (b) Infrastructures	Interlocked surface road to be
- Public roads	upgraded/creation of a right of way to access
	the fuel station

## **Brief project description**

The fuel service station will provide the following services: a small grocery store/ stop shop (already existing), vehicle products, diesel and petrol. The following service infrastructures will be created for the filling station's operation:

- Service area building (administration office)
- Solid and sewer management facility
- Truck parking lot
- Car wash
- Car tyres and spare parts shop
- Access roads
- Firefighting equipment and
- Lighting

Two contemporary fuel dispensing pumps, one for petrol and one for diesel, will be installed as part of the project. One petrol tank will be 3.5 meters underground, one diesel tank will be above ground, and both will have a capacity of 26 000 litres respectively. The petrol pump will operate under the shade. To provide good environmental protection, a localized drainage system must be installed to catch escaping leak fuel that will be transported to an oil separator.

## **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:

### a) 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.

## b) 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.

## c) 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.

## d) 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 through public meeting, and display of A4 Notice poster at the frequented public areas near the site, as well as notices in the newspapers (Confidente and The Republikein).

## Major potential Environmental impacts identified

Table 2 Key identified potential environmental impacts

Positive impacts	Negative impacts	
Long-term advantages of the project will	Wastewater/effluent run-off pollutes soil and	
include an increase in stable employment and	water resources; Health and Safety risks and	
income prospects, greater site utilization,	hazards, such as fire outbreaks.	
infrastructure upgrades, and higher tax	Pollution will harm the environment; noise	
revenues for local and national governments,	pollution and air pollution (due to	
among other things.	construction dust) and the possibility for	
The initiative will have favourable effects in	project delivery heavy vehicles to emit	
the short term, such as more artisan and	pollutants.	
casual jobs;		

## 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.

## Table of content

## Table of Contents

EXECUTIVE SUMMARY	i
1. INTRODUCTION	1
1.1 Project background	1
1.2 Purpose of EIA	1
1.3 Terms of reference	2
1.4 Study limitation	2
1.5 Assumptions, uncertainties/gaps in knowledge	3
2. DESCRIPTION OF EXISTING PROJECT ACTIVITIES	4
2.1 Project location	4
2.2 Project description	5
2.2.1 Details of any nearby environmental features	
2.2.2 Environmental Protection Measures	
2.2.3 Site Layout 2.2.4 Site Lay Out Plan	
2.2.5 Solid waste and sewer management	
2.2.6 Fire Fighting Protection	
2.2.6 Lighting	7
2.2.7 Implementation Strategy	8
2.3 Project Alternatives	
2.3.1 Project location alternative	8
3.LEGAL FRAMEWORK	9
5. ENVIRONMENTAL IMPACT ASSESSMENT	14
5.1 Overview	14
5.2 Identified potential impacts	14
5.2.1 Direct and indirect effects	
5.2.2 Cumulative and Irreversible effects	15
7.1 Listed activities	
7.2 Roles and responsibility in EMP implementation	
7.2.1 Environmental Management Plan administration	19
7.2.2 Environmental Awareness Training	19
7.3 Scope of the Environmental Management Plan	
7.3.1 Scoping exercise	
7.3.2 Existing environmental conditions	21
7.3.3 Analysis of potential environmental impact	22
7.3.4 Formulation of possible mitigation measures	22

22
24
24
24
24
24
27
28

#### **1. INTRODUCTION**

#### **1.1 Project background**

The proponent, Kanjira Bread Investment cc, proposes to develop and operate a service station in Drimiopsis (Farm 1003), Kalahari constituency (Gobabis district), Omaheke region, along the C22 Trans Kalahari Highway road.

The proposed development will result in the development of two fuel storage tanks of which one will be an underground petrol tank and one will be an aboveground diesel tank connected to two dispensing pumps whereby each pump will have two nozzles. The proposed tanks will have a capacity of 26 000 litres of both petrol and diesel, totalling to a combined capacity of fuel storage of 52 000 litres (52 m<sup>3</sup>). The project development will cover a total land area of 22 350 Hectors.

Drimiopsis is regarded as a growth area or Central Business Development of Kalahari constituency. It enclosed Kalahari constituency office, Drimiopsis primary School, Mokganedi Thlabaneb High School, and few retail shops, this implies that most of the people travel to Drimiopsis for basic services. In addition, community members travel long distances of about 45 Km to Gobabis and 121.5 Km to Otjinene to look for filling station.

This has open 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.

The Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) and the EMA No.7 of 2007 were then triggered, and Katjirua Bread Investment cc subsequently appointed Advanced Environmental Agency to carry out the Environmental Impact Assessment (EIA), prepare an environmental assessment report, and develop an Environmental Management Plan (EMP).

#### **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 assessment is to apply for an ECC in accordance with the Environmental Management Act's requirements (Act No 7 of 2007).

## **1.4 Study limitation**

The data obtained from sources involved in this project is regarded as being of a reasonably high standard. It will be considered that all planned project operations will result in benefits

from a sustainable development strategy. However, an Environmental Management Plan (EMP) will be established for the proposed project in order to ensure that the receiving environment is not negatively impacted from the project's inception through implementation of the proposed land development and servicing project. The Proponent leased the land, hence no other site alternatives shall be taken into account in this report as part of the project scoping. As a result, the study is limited to that property, land, and the environment surrounding it. This assessment only evaluates the proposed project location, its surroundings, and the environmental and social implications of proposed fuel service station development activities.

#### 1.5 Assumptions, uncertainties/gaps in knowledge

Each assumption, uncertainty, and knowledge gap disclosed and noted below complied with Section 15(2) of the EMA Act No. 7 of 2007. (I). All presumptions were derived from the EAPs' reasonable experience. All data from an unpublished research is valid and accurate, and the scope of this investigation is limited to evaluating the potential environmental effects associated with the proposed project and their specialist consultants' proposed project. Advanced Environmental Agency does not accept any responsibility in the event that additional information becomes available later in the process. Community members and project stakeholders were aware of the entire endeavour.

### 2. DESCRIPTION OF EXISTING PROJECT ACTIVITIES

#### **2.1 Project location**

The proposed project development will be located at Drimiopsis (Farm 1003), Kalahari constituency (Gobabis district), Omaheke region, along the C22 Trans Kalahari Highway road. 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 Drimiopsis Traditional Authority for the purpose of developing the proposed construction of the fuel service station.

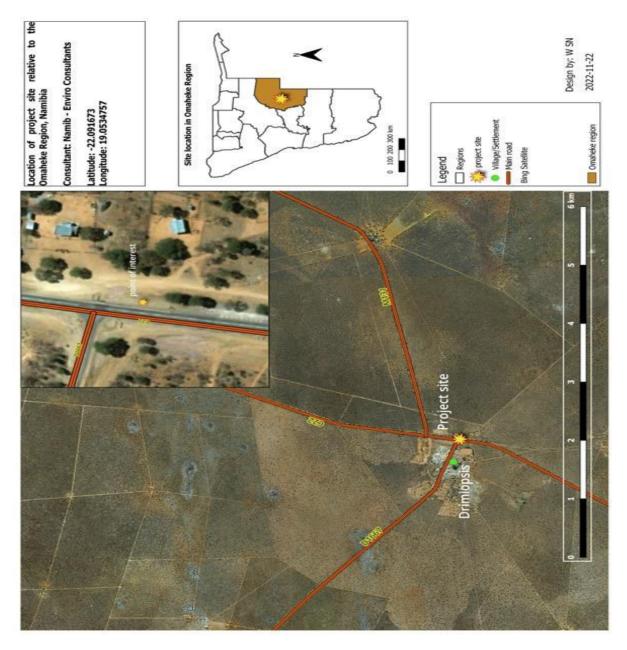


Figure 1 Locality map of the Katjirua Bread Investment cc fuel station site in Drimiopsis, Omaheke Region

#### **2.2 Project description**

#### 2.2.1 Details of any nearby environmental features

There are no environmentally significant features near the project site that could be harmed by service station discharge leaks; only few trees (Few large *Vachellia erioloba, and* two large *Leucaena leucocephala* which the proponent proposed to uproot and replant them at an identified site). In addition, within 650 meters of the project site there are small retail shops and a single house. Existing retail shop with a bakery shop behind the shop.



Figure 1 Existing infrastructure of the proposed service station (existing retail shop with a bakery behind, toilets and take away)

The proposed service station will supply fuel (diesel and petrol), a convenience store, and ablution facilities to Reimposes residents and residents of adjacent communities, as well as users of the Trans Kalahari Highway road. 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.

Two contemporary fuel dispensing pumps, one for petrol and one for diesel, will be installed as part of the project. One petrol tank will be 3.5 meters underground, one diesel tank will be above ground, and both will have a capacity of 26 000 litres respectively. The petrol pump will

operate under the shade. To provide good environmental protection, a localized drainage system must be installed to catch escaping leak fuel that will be transported to an oil separator.

The activities related to the planned fuel station's preconstruction, construction, operating, and rehabilitation phases are summarized here. These activities were taken into account as potential sources of consequences (environmental variables) during the impact assessment.

- Establishing a secondary right of way to access the service station
- Barrier surrounding the fuel station's back (already exist but need to be upgraded)
- Obtaining Power and Water (by connecting to an existing water and power system, and installation of Diesel Generator as a backup)
- Building the infrastructure needed for fuel and value-added production (Car wash, Truck park Car tyres and spare parts shop, and ablution facilities)
- Closure and Decommissioning, as well as Land Restoration following Closure.

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

## 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.
- Construction of related structures and infrastructure.

#### **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.

#### DECOMMISSIONING PHASE

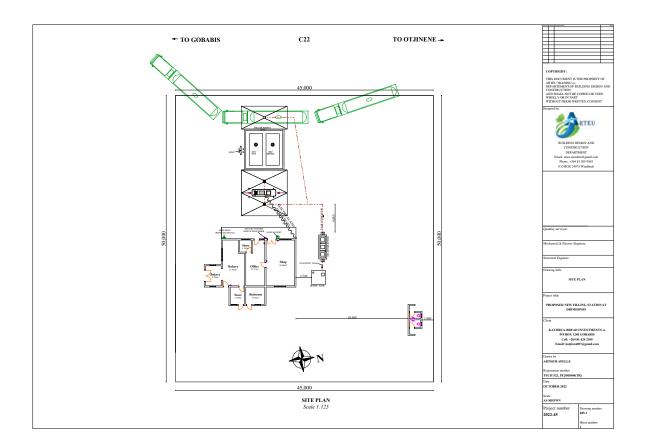
Removal of all infrastructure that will not be reused during future land usage; and land rehabilitation.

#### 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

## 2.2.4 Site Lay Out Plan



#### 2.2.5 Solid waste and sewer management

#### 2.2.5.1 Waste Management

Waste containers will be provided for entire project site to keep waste temporarily before it is delivered to an approved damping solid waste site which is few Kilometres behind Drimiopsis Primary School.

#### 2.2.5.2 Sewer Management

There is a single sewer line that serves the entire expansion area. As a result, the planned site will be served by existing septic tanks system.

#### 2.2.6 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.

#### 2.2.6 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.

### 2.2.7 Implementation Strategy

The project will begin with the marking of the project area, followed by fencing and the onsite 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.

#### **2.3 Project Alternatives**

#### 2.3.1 Project location alternative

From the impact assessment of the biophysical and socio-economic aspects discussed in detail in this report it is evident that the proposed development of the Drimiopsis Service Station is suitable for the site assessed. From the detailed impact assessment, it is clear that most of the impacts can be mitigated to an acceptable standards. The erf has already been cleared and infrastructure of sewerage installed and, there are only few large *Vachellia erioloba, and* two large *Leucaena leucocephala* trees on the site thus cannot be classified as a Greenfield.

There is no vegetation to be protected or artefacts heritage to discover or protected as ground works and levelling has already been undertaken. The environmental aspects and health and safety hazards associated to the site can be mitigated by being constructed and operated according to best environmental best practice.

#### **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).

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

Table 3 Applicable environmental le	egal framework and their relevance to t	the project
-------------------------------------	---	-------------

		all aspects inclusive of theassessmentprocessacquireenvironmentalclearance.
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; tomake 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.

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

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

#### 4. Description of the current environment

#### 4.1 Climate

conditionsRainfall generally increases from south to north, and there is also a zone of higher rainfall caused by orographic uplift over the Grootfontein-Otavi-Tsumeb hills. Rainfall also varies greatly from year to year, causing wide variation in pasture availability, carrying capacity, rates and kinds of livestock offtake, meat prices, and the economic viability of farms.

#### 4.2 Hydrology

In Omaheke in northeastern Namibia in the border region to Botswana a tectonic Graben, the so-called Eiseb-Graben was chosen for a detailed research because good chances for the development of fresh groundwater resources were expected to be give. This area is part of a national repatriation program for the Herero tribe, which the German side has promised to support.

#### **4.2 Soil**

The two regions lie on the western edge of a vast basin of sand, and it is this sand that determines much about the vegetation, wildlife, farming and mineral potential of the region. Groundwater is generally available throughout both regions, and the quality of water is also generally good. Higher yielding aquifers are present in several areas: around Grootfontein, Leonardville, Hochfeld and in the Eiseb.

The landscape soil and topography of Omaheke region is dominated by the Kalahari grand soil and flat plain and otjozondjupa is chracteristics central plateu fairly plains around the omatako plains mountain ranges and massive bright red sandstone cliff however the plot is located on silt soil and flat plain soil.

#### 4.3 Flora and Fauna

The small settlement is located few km from Gobabis .the area is known for farming purposes and other business. Though the nature of the area have potential habitant for both wild and livestock, the flora and fauna found in the region are known to be welicthia,eland wattle, black thorn.fauna:rubber frogs-pottted rubber frog etc.a very limited number of wild animals like wild dogs,kudu, and rabits found habitat in the area how ever the life of fauna and flora stand no chance of disturbance from the proposed project.the site is located a cleared spot as it along side the road making it of less use to wild life nature.

#### 4.5 Socio-economic

Omaheke region is one of the less populated area, the history of the region includes a portion of ova Herero people, Setswana, as well as farmers. Omaheke region stretches from Gobabis towards the Botswana border. The area concentrates more on farming activities, farming with cattles, sheep as well as other agricultural practices like growing cabbages, butter nuts etc. Gobabis town is supplied with food from this farm. these farmers have opened shops creating jobs for the youth as well as reducing the high rates of food imports from south Africa which Namibia highly depends on. The cultural diversity of the region has attracted a number 40 up depends on farming to make a living for families. The trans- Kalahari road pass through Omaheke creating. Though all this is happening the population in the region have increased over the past years and the demand for job opportunities have increased a number of youth increase.

The proposed project will contribute to the economic growth increasing the employing rate. The operation of the filling station will also attract other types of development to the area.as Namibia have currently discovered oil; the number of filling stations will create a good market supporting the Namibian made.

#### 5. ENVIRONMENTAL IMPACT ASSESSMENT

#### 5.1 Overview

This chapter will analyse possible environmental and socio-economic consequences based on the current environmental and social structure of the project operations on ground. 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.

5.2 Identified potential impacts5.2.1 Direct and indirect effectsSocioeconomic impacts

The proposed project will create employment opportunities to people within the project region as it is targeting to employ at least 15 people, during both construction and operation phases, thus generating wealth and improve livelihoods. Besides direct employment, the project will:

- Improve efficiency in production as the farmers will be able to access fuel commodities and related products within a closer distance,
- Revenue generation that will contribute to the national income through tax on profits and VAT (Value Added Tax) collections.
- Reduced accidents through the provision of safe parking place for long distance drivers.
- Access to fuel products to the general bulk users alike.

# 5.2.2 Cumulative and Irreversible effects Impacts of construction activities

During the construction phase, sources of negative environmental impacts will emanate from the site preparation activities including excavation of soils, and other geological formations, levelling of landscape and the subsequent construction activities.

The biophysical environment will be negatively impacted by the actions listed above in many ways. The ensuing disturbance of the exposed topsoil, which could lead to soil erosion and siltation, will have immediate detrimental consequences. The combined effect of site preparation and construction activities on the site has the potential to cause soil erosion. Continued soil loss may occur as a result of development on the altered site, particularly during the construction period when the earth is exposed. Rainwater washing away soil can have serious ecological repercussions. At the location, however, this is not expected. If proper building processes are not followed, there may be negative repercussions linked to visual intrusion, pollution, and negative socio-economic implications (including safety and health dangers), among other negative aspects.

Impacts due to the	Measurement	Rating	Mitigation
installation of the			
tank			
	Duration	Dormonant	If possible rehabilitate the site often
	Duration	Permanent	If possible rehabilitate the site after
	Extent	Site specific	construction

Table 1 Identified potential impacts and their mitigation measures

Landscape	Magnitude	Low	
alternation: digging	Probability	Fairly likely	
and excating	Reversible	Reversible	
Vegetation: Flora	Duration Extent Magnitude Probability Reversible	Medium Site specific Low Definite Reversible	Reintroduction/replanting endemic or noninvasive plants at the site upon ceasing of the project.
Access roads: establishment of road tracks	Duration Extent Magnitude Probability Reversible	Permanent Site specific Low Very likely Reversible	Use existing access roads
Oil spills: soil pollution (oil leakeges from machinery)	Duration Extent Magnitude Probability Reversible	Short-term Local Low Definite Reversibility	If an oil spill occurs, collect the contaminated soil, store in drums 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	Duration Extent Magnitude	Short-term Local Medium	Use dust suppression measures to mitigate dust impacts

transportation of the	Probability	Definite	Provide dust masks and ear muffs	
sand and cocrete)	Reversible	Reversible	to machinery operators	
	Duration	Long and		
Socio-economic		short-term	Employ local labour as far as	
environment:	Extent	National &	possible	
development and	Lixent		local	Establish on the job training and
employment		Medium	other capacity development	
opportunities	Magnitude	Definite	training	
	Probability	Reversibility	programs	
	Reversible			

#### 6. ENVIRONMENTAL MANAGENT PLAN

This Environmental Management Plan (EMP) was prepared as part of the Scoping Report for the planned aboveground petrol tank development facility by the proponent as part of the Environmental Assessment. The content has been adapted in accordance with the Environmental Management Act of 2007 (Act No. 7 of 2007) Regulation No. 30 of 2012, listing No. 8(j) (aa) (bb) (cc). The goal is to develop management strategies to address the environmental consequences indicated in the Scoping Report.

The Environmental Management Plan for impacts related with the proposed installation of the aboveground petrol tank is described in this section. Environmental projects must be managed in a methodical, planned, and documented manner, according to the EMP. The Environmental Management Plan outlined below summaries the organizational structure, planning, and monitoring for environmental preservation at the proposed project site development.

#### 7.1 Listed activities

An Environmental Clearance Certificate (ECC) is required for Listed Activities, and an Environmental Impact Assessment (EIA) is also required. The MET: DEA is devoted to promoting environmental management principles as the governmental institution responsible for the management and conservation of its natural resources. The Environmental Protection Agency (EPA) publishes a list of operations that require an EIA, and the proposed fuel tank is one of the specified activities or activities that cannot be carried out without an ECC. The goal of project activities that are described is to guarantee that the environmental implications are thoroughly examined.

The planned fuel storage tank's continuation would result in a number of Listed Activities as defined by the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011). The following Table 5 is the listed activities induced by the proposed project.

Listed activity	Applicability	Operation of the activity
Activity 9.4 Storage and	The storage and handling of a	The project involves the
handling of dangerous	dangerous goods, including	handling and storage of
goods	petrol, diesel, liquid petroleum	dangerous goods.
	gas or paraffin, in containers	
	with a combined capacity of	
	more than $30 \text{ m}^3$ at any location.	
Activity 9.5 Storage and	Construction of filling stations	Installation of an
handling of dangerous	or any other facility for the	aboveground petrol tank.
goods	underground and aboveground	
	storage of dangerous goods,	
	including petrol, diesel, liquid,	
	peroleum, gas or paraffin.	

Table 2 List of activities in the EIA regulation concerning the proposed project

## 7.2 Roles and responsibility in EMP implementation

### 7.2.1 Environmental Management Plan administration

The management and staff, including the construction team, shall be required to familiarize themselves with the content of the document while the project Manager shall be tasked with the overall responsibility for the implementation thereof once the development is operational.

## 7.2.2 Environmental Awareness Training Installation phase

The owner and construction company shall ensure that all his/her staff are aware of the importance and implications of the EMP and the need to commit to the relevant provisions contained in the document.

## **Operational phase**

The operational phase shall require that roles and responsibilities for all employees need to be established while the reasons and importance of mitigation measures shall be clearly explained, and this shall be an ongoing process. The positive socioeconomic and biodiversity impacts involve a number of external stakeholders and these relationships require close and regular interventions. Before commencement of business, the management shall send all its key personnel for training in handling dangerous and hazardous goods.

Table 3 Roles and responsibility in EMP implementation

Roles	Environmental responsibilities		
Project Manager	Enforce the EMP	implementation	to
	contractors and all project workers.		

Environmental Control Officer	<ul> <li>Implement, review and update the EMP.</li> <li>Ensure all reporting and monitoring required under EMP is undertaken, documented and distributed as needed</li> <li>Conducts environmental audit at work site with the support of environmental consultant.</li> <li>Ensure materials being used on site are environmental friendly and safe.</li> </ul>
The Department of Environmental Affairs	<ul> <li>Approve the EMP and any amendments to the EMP.</li> <li>Review and approve environmental reports submitted as part of EMP implementation.</li> </ul>
Environmental Consultant	<ul> <li>Conduct and monitor actions required by the EMP if required</li> <li>Conducts environmental audit at work site</li> <li>Ensure materials being used on site are environmental friendly and safe.</li> </ul>
Site/Project Engineers	<ul> <li>Control and monitor actions required by the EMP.</li> <li>Ensure documented procedures are followed and records kept on site.</li> </ul>

Labour       -       Follow requirements as directed by site engineers.         -       Report any potential environmental issues to site engineer/project manager, indicating spilt oil, excess waste, excessive dust generation, dirty water running off the site and other possible non-conformances.         -       Compliance with the environmental specifications and enforce adherence.         -       Maintain a record of activities		- Ensure any complaints are passed onto the management within 24 hours of receiving the complaint.
relevant to environmental management.	Labour	<ul> <li>site engineers.</li> <li>Report any potential environmental issues to site engineer/project manager, indicating spilt oil, excess waste, excessive dust generation, dirty water running off the site and other possible non-conformances.</li> <li>Compliance with the environmental specifications and enforce adherence.</li> <li>Maintain a record of activities relevant to environmental</li> </ul>

#### 7.3 Scope of the Environmental Management Plan

Namib-Enviro Consultants carried out and prepare the EMP according to a set of guidelines. Because of the importance of involving Interested and Affected Parties (I&APs) in environmental studies, the EMP ensures that I&APs concerns are addressed, as consultations were central to every step, such as MEFT's approval of the clearance process, which included local communities and nearby farm owners.

#### 7.3.1 Scoping exercise

The scoping exercise aimed to identify and screen all relevant concerns associated to project development, as well as determine whether any detrimental consequences occurred that could render the proposed project ecologically unacceptable as soon as possible.

#### 7.3.2 Existing environmental conditions

Environmental and socioeconomic data from the surrounding areas were collected, processed, and analyzed to determine the current environmental conditions in the project area. The results of the analysis are reported in the sections below. Secondary data for the paper came from previous biological, zoological, botanical, and socioeconomic research conducted in the area.

## 7.3.3 Analysis of potential environmental impact

An assessment of the proposed project's environmental consequences and benefits in terms of the biophysical and socioeconomic environment, as well as an analysis of the impacts' scope, duration, intensity, and significance, has been carried out.

### 7.3.4 Formulation of possible mitigation measures

Based on the analysis of findings, a number of measures and plans for mitigating the identified possible adverse environmental impacts of the project are proposed. Further, the report proposes measures and plans for enhancing positive environmental impacts of the project. And wherever possible, the costs and benefits of these environmental measures are quantified.

#### 7.4 Stakeholder consultation

The public will be notified via newspaper advertisements and a notice placed at the project location (the proponent's farm). The project will have a 14-day comment period following the publication of the newspaper advertisements.

#### 7.5 Monitoring

Environmental monitoring will involve measurement of relevant parameters, at a level of details accurate enough, to distinguish the anticipated changes. Monitoring aims at determining the effectiveness of actions to improve.

Negative impacts	egative impacts Mitigation measures		Monitoring	
	Constructio	n phase		
Oil spillage	Ensure NO oil spillage	Contractor Supervising and	Inspection/Obs	
Noise	occurs	Environmental	ervation	
Dust	Ensure use of Manual	expert		
Soil	labour and hand tools			
Operation phase				
General maintenance	Oil Spillage	Ensure use of appropriate	Proponent -	
of the fuel storage	Possible asphyxiation of	PPEs for tank cleaners	routine	
tank, regular	tank cleaners	including oxygen masks.	inspection	
cleaning	Generation of waste	Establish an environmental		
of the tank	materials, e.g., paints,	record keeping system.		
	painting accessories			

Table 4 Management strategies to address the environmental impacts of the proposed project

Generation of Solid	If not properly	Ensure solid waste is	Proponent	
waste	managed, could create	collected regularly by		
	hazardous conditions	professional waste		
	for those within the	handlers and disposed of at		
	vicinity of the project	the designated dumping		
	site.	sites.		
Generation of	If not properly	Ensure the sewage waste	Proponent	
sewerage, waste	managed, could	water is collected and		
water	compromise sanitary	disposed of into the		
	hygiene of the	properly constructed septic		
	development result in	tanks.		
	closure of the facility			
Decommissioning phase				
Site closure and	Oil spillage	Clean and treat all oil	Contractor	
demolition of the site	Noise	contaminated areas and	Environmental	
office, and all other	Dust	tools, and dispose at an	expert	
associated	Solid waste	authorised dumping site.		
infrastructure	Soil destruction	Implement an appropriate		
		re-vegetation programmed		
		to restore the site to its		
		original status.		

## 8. PUBLIC PARTICIPATION

#### 8.1 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.

#### 8.2 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.

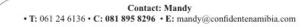
#### 8.3 Distribution of Background Information Document (BID)

The BID gave a synopsis of the proposed project, as well as the project proponent and the entire EIA procedure to be followed.

#### 8.4 Public Announcement

Notification of the start of the EIA process for the project was advertised in two Namibian national newspapers, Republiek and Confidente, 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.

## Classifieds





#### ENVIRONMENTAL IMPACT ASSESSMENT

NOTICE FOR THE PROPOSED ESTABLISHMENT OF A SMELTER PLANT AT WALVIS BAY IN

OUTRUN CONSULTANTS CC HEREBY GIVES NOTICE OF THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED ESTABLISHMENT OF SMELTERS AND THE MANUFACTURING OF VARIOUS METAL AND PLASTIC PRODUCTS AT WALVIS BAY. The Smelters and manufacturing plants will be located at Pioneer Industrial Estate at the corner of C14 and C34 roads. An EIA is being commissioned as required under the Environmental Management Act, 7 of 2007 and Regulations of 2012. Interested and Affected Parties are invited to register and attend meetings as detailed below.

PROPONENT(S): KONTINENTAL INDUSTRIAL PRODUCTS (PTY) LTD

PROJECT ACTIVITIES: CONSTRUCTION & OPERATION OF SMELTER AND THE MANUFACTURING OF VARIOUS METAL AND PLASTIC PRODUCTS

PROJECT LOCATION: FARM 58 WALVIS BAY -ERONGO REGION - MAP IS PROVIDED IN THE BID

PUBLIC PARTICIPATION: OUTRUN CONSULTANTS CC IS INVITING YOU TO REGISTER AS INTERESTED AND AFFECTED PARTIES AND ATTEND MEETINGS TO BE HELD ONSITE AS FOLLOWS:

DATE: 14 October 2022 TIME: 1000HRS

DEADLINE FOR REGISTRATION AND COMMENTS 21st OF OCTOBER 2022

Contact Person: Josiah – 0812 683 578, E-Mail: outrungreeninfo@gmail.com











ENVIRONMENTAL IMPACT ASSESSMENT FOR INSTALLATION OF AN ABOVEGROUND TANK IN MURURWANI OTJOZONDJUPA REGION

Advanced Environmental Agency herewith gives notice in terms of the Environmental Management Act, 7 of 2007 and Regulation 21 of the Environmental ImpactAssessment (EIA) for the installation of an aboveground fuel tank in Farm 1032 B Mururwani, Otjozondjupa region.

PROPONENT: Ndume Trading cc PROJECT DESCRIPTION: Installation and operation of an aboveground

PROJECT LOCATION: Between Rundu and Grootfontein (Farm 1032 B)

Interested and Affected parties (I& AP) are invited to register with Advanced Environmental Agency for the proposed installation and operation an aboveground fuel tank 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: 25th March 2022

Email: info.advanceenviroment@gmail.com Cell: 081 480 1644



#### ENVIRONMENTAL IMPACT ASSESSMENT FOR THE COSTRUCTION AND OPERATION OF A PROPOSED FILLING STATION PROJECT AT DRIMIOPSIS, OMAHEKE REGION

Advanced Environmental Agency herewith gives notice in terms of the Environmental Management Act, 7 of 2007 and Regulation 21 of the  $\label{eq:environmentalImpactAssessment} ({\sf EIA}) for the installation of an above ground$ fuel tank in Outapi, Omusati region.

PROPONENT: Katjirua Bread Investment cc

PROJECT DESCRIPTION: Construction and operation of a Filling station PROJECT LOCATION: Drimiopsis, Kalahari constituenc-Omaheke region

Interested and Affected parties (I& AP) are invited to register with Advanced Environmental Agency for the proposed installation and operation an aboveground fuel tank 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: 25th October 2020

Email: info.advanceenviroment@gmail.com Cell: 081 480 1644



ENVIRONMENTAL IMPACT ASSESSMENT FOR INSTALLATION OF AN ABOVEGROUND TANK IN MURURWANI OTJOZONDJUPA REGION

Advanced Environmental Agency herewith gives notice in terms of the Environmental Management Act, 7 of 2007 and Regulation 21 of the Environmental Impact Assessment (EIA) for the installation of an aboveground fuel tank in Outapi, Omusati region.

PROPONENT: Gwashekulwama Trading cc PROJECT DESCRIPTION: Installation and operation of an aboveground fuel tan

PROJECT LOCATION: Outapi, Omusati region

Interested and Affected parties (I& AP) are invited to register with Advanced Environmental Agency for the proposed installation and operation an aboveground fuel tank 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: 19th June 2020

Email: info.advanceenviroment@gmail.com Cell: 081 480 1644

#### 9. CONCLUSIONS

The EIA procedure for the proposed installation of the above ground petrol tank 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).

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 proposed development, in our opinion, is a timely enterprise that will contribute to the proponent's timely investment as well as the government's aim to tax fuel in Namibia.

As a result, Namib-Enviro Consultants came to the following conclusions and made the following recommendations:

The detected possible negative consequences linked with the proposed project and related activities were deemed to be of medium magnitude. The project can move on with its implementation as long as the mitigating measures outlined are followed. Nonetheless, major attention should be directed toward minimizing the occurrence of consequences that would impair the environment as a whole. As a result, by properly executing the recommended management action steps and conducting ongoing monitoring as advised below, these impacts can be reduced. As a conclusion of this report's observations it is recommended that the development be approved because the local public is very enthusiastic and eager to see progress in their neighbourhood.

As a result, it is recommended that the project site's petrol tank construction and operations be given an Environmental Clearance Certificate, provided that the proponent adhere to the the provided EMP.

### REFERENCES

Mendelsohn, J. (2006). A digest of information on key aspects of Otjozondjupa and Omaheke's geography. RAISON.

Mendelsohn, J., & el Obeid, S. (2006). A digest of information on key aspects of Kavango's geography and sustainable development prospects. Research and Information Services of Namibia.

MET. (2011). Let's Act to Adapt: Dealing with Climate Change A community information toolkit on adaptation. Integrated Environmental Consultants Namibia.

NSA. (2012). Otjozondjupa 2011 Census Regional Profile: . Windhoek: Namibia Statistic Agency.