

ENVIRONMENTAL IMPACT ASSESSMENT (EIA): FINAL SCOPING
REPORT FOR THE
INSTALLIG AND OPERATION OF AN
ABOVEGROUND TANK (DIESEL) AT
OPUWO(ALPHA) KUNENE REGION
(NAMIBIA)

SUBMITTED TO:

THE ENVIRONMENTAL COMMISSIONER
MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM

PROJECT PROPONENT:INCLUSIVE INVESTMENT CC

PO BOX 215
OPUWO



ALPHA ABOVE GROUND STATION

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	3
1.1 Executive Summary and Overview	3
1.2 Project Proponents	11
1.3 Scope of the EIA Study	11
1.4 Stakeholder Consultations	13
CHAPTER 2: DESCRIPTION OF PROPOSED PROJECT	20
2.1 Location	21
2.2 Project Rationale	21
2.3 Project Description and Alternatives	21
2.4 No Go Alternative	23
CHAPTER 3: LEGAL, REGULATION AND POLICY FRAMEWORK	24
CHAPTER 4: DESCRIPTION OF EXISTING ENVIRONMENT	26
4.1 Physical Environment	26
4.2 Biological Environment	27
4.3. SocioEconomic Environment	28
CHAPTER 5: POTENTIAL ENVIRONMENTAL AND SOCIOCECONOMIC IMPACTS	30
5.1 General Considerations	30
5.2 Prediction of Impacts	31
5.3 General Impacts	32
5.4 Impact Criterion and Classification	32
5.5 Potential Impacts	34
CHAPTER 6: ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN	41
SECTION	PAGE

APPENDICES

- APPENDIX A: Letter from
- APPENDIX A1: Design or layout of the Aboveground Tank
- APPENDIX B: Proponents Leasehold/Contract
- APPENDIX C: letter from
- APPENDIX D: CV. Albertina Simon/COMPANY PROFILE

CHAPTER 1: INTRODUCTION

1.1 Executive Summary and Overview

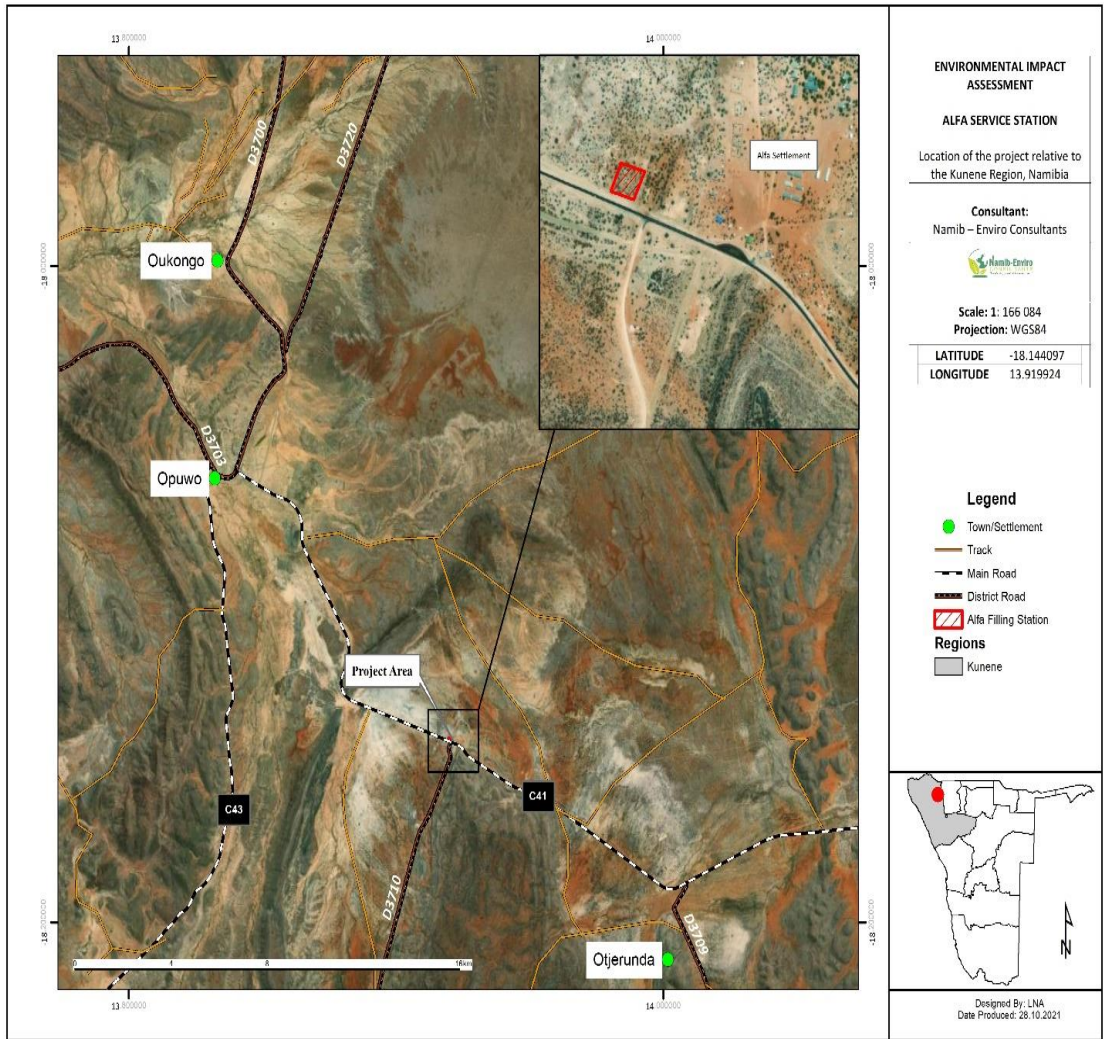
The importance of environmental protection and conservation measures has increasingly been recognized over the past two decades in Namibia. It is now generally accepted that economic development strategies must be compatible with environmental goals. Specifically, this requires the incorporation of environmental dimensions into the process of development. Hence, it has become important to make choices and decisions that will eventually promote sound development by understanding how the environment functions. The proposed development inclusive investments cc , **hereafter the Proponent** aims to ensure this balance when developing the aboveground tank **hereafter the development**. It also important to note that the **Proponent will be operating in partnership with Acer petroleum a company with already has similar business in Namibia.**

Inclusive investment cc is a Namibian private owned company. The company has been in operation for the past 9 year now active on different activities. Inclusive investment CC investments has proven track record of its experience in running business such as food supermarkets, agriculture as well as farming and other investments.

Project Site or Location

The Diesel Aboveground tank is proposed to be installed in Alpha settlement a village located 15km before opuwo business district along road D3707 within the Traditional authority open land in a settlement area. The place is completely cleared in a settlement area. During the visit on the site, the proponent intends to use more than 1200m² which includes the whole plot for the installation and in the future convert it to a filling station , stop shop and car wash. The portion under consideration is 15km before opuwo business district and the site is located in a business zoned area . During the site visit, the accessor didnot find any special or protected species on site as its already cleared (see attached annex of the site picture of tree species foundin the proposed development area. In accordance with the requirements of the regulations that feasible and reasonable alternatives be considered, which includes the consideration of alternative sites, there are no similar business identified with the same road during the site visit,spending 30 to an hour on site 10 to 20 vehicles would pass within 20 minutes due to high number of tourism vists therefore the need of the proposed facility is a need in the refered location.Subsequent to the Scoping phase and discussions between the applicant and the regional council this site was identified, and approved by the alpha ondore dtraditional authority .

No subsequent site was identified for the installation of diesel overhead tank, and its amenities, however the site is identified by the proponent as a suitable site that is located on a highway and it is best for the type of proposed business.



The proposed development involves:

The study area includes a site at alpha 15 km before opuwo town in okunene region. The proposed activity entails the Installation of a (diesel) above ground tank, one stop shop and amenities development comprising of:

- 1 Above ground tank, capacity of 23 000 liter (23 cubic meters) capacity.
- 1 pumps, with three nozzles each (1 pump with 2 nozzles for Diesel) see picture for detail.
- Dispensing pump

In addition, it is proposed to construct the following tourism related facilities as part of the development

- Toilet and shower.



Figure 1: Concept layout of project ERF showing location of Above ground and related facilities, courtesy of

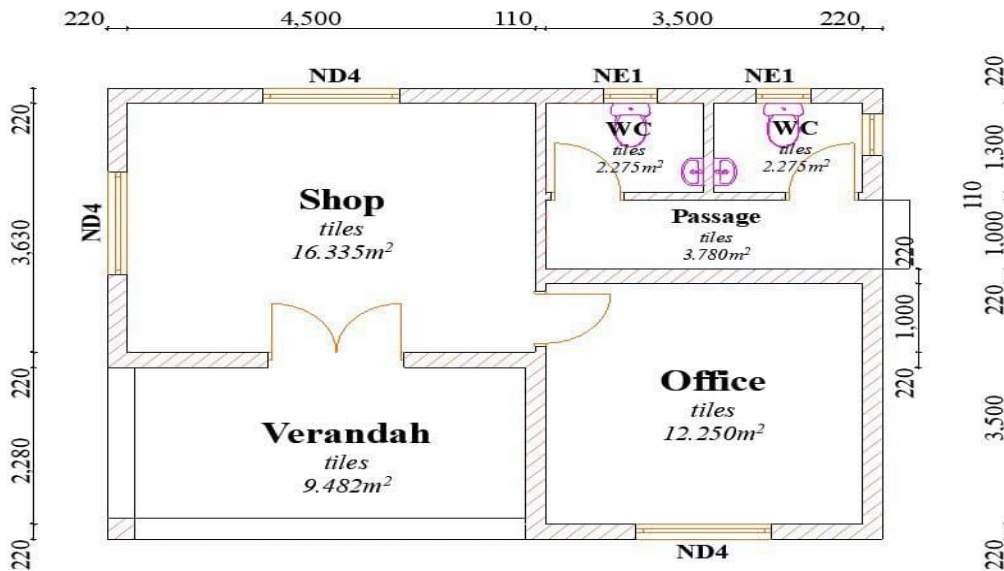
Description of the facility (Continue)

Standard industrial practice will apply under the canopy by slightly raising the paver or concrete

design.

The installation of the fuel tanks and pipelines at the above ground tank will be in line with SABS Standards(SANS 10089: Parts 1^3). In terms of these standards:

- Above ground diesel storage tanks (ASTs) should be, as a minimum, composite tanks (fiberreinforced resin coated steel tanks) see above picture 1 for detail
- Installation requirements for ASTs are prescribed
- Filler point containment measures for the containment of spillages during tank filling are prescribed and
- Supply pipeline types, containment measures and installation requirements are specified.



Coatings

internal tank corrosion, bottom coatings will be used to prevent corrosion . this will also help reduce interior bottom (topside) pitting, but as well as reduce finished fuel contamination and tank cleaning costs.

plate that has been "descaled will be used to prevent bottom crossion." "Scale" is iron oxide that results from the mill process. The galvanic corrosion, when the plate is placed in an environment suchas the underside of a tank bottom, will significantly accelerate pitting.

Improving of bottom intergrity

The cleanliness of welds is important. Bottom plates are located on the ground and subject to dirt and moisture, which promote porosity and cracks in welds. Square corners at the joints where three plates come together or lap patches cannot be easily welded without defects. Bottom construction will involve the use of fillet

The plates will be welded in a complex and precise procedure in order to be tight to avoid problems oil leakage

Fuel from these tanks will be pumped from the tank through the pump in pipelines, which will be connected from the tank to the pump. where it will finally be dispensed into customers' vehicles. Dispensing pumps will be fitted with emergency cut off valves as specified by the relevant legislation and standards, and the pumps will have a vapor return system.

As per current standard practice, and in fulfillment of the requirements of the National Water Act and SABS 089:1999, all storm water that may potentially be contaminated by fuel or oil spills will be directed to a separator unit prior to exiting the site. In addition, waste water from the carwash facility will drain through a separator before discharge to sewer.

1.1 PURPOSE OF THE EMP

PURPOSE OF THE SCOPING REPORT (SR)

This SR serves to determine, analyze and present the environmental management plan (positive and negative) of a proposed development project for the construction of the installation of the aboveground diesel tank and its operations and associated infrastructure, formulate remedial measures to minimize and mitigate the negative impacts and plan in such a way that enables a rational decision to be made regarding the implementation and management of the proposed project. This Environmental scoping report will further contribute to the reduction or mitigation of adverse impacts by generating a number of project alternatives for the proposed installations of the above ground tank development. In general, the purpose of this Environmental scoping report is to anticipate and prevent, minimize and/or manage, potentially significant negative impacts of development that may:

- Cost too much money to rectify in the future
 - Pose risk to lives, livelihood or health of current and future generations
 - Result in irreplaceable loss of resources and reduced options for future well-being
- and,
- Help to seek opportunities to optimize potential benefits of development.

As a responsible local member, the Proponent is committed to enhance positive

Biophysical and social environmental impacts of the project while mitigating negative impacts of the project. During the scoping exercise, the Proponent has emphasized that he attaches great importance to environmental sustainability and human well-being. The Proponent also recognizes the strong correlation between environmental sustainability and human well-being through good health that depends on healthy ecosystems, clean water and air.

Therefore, this Environmental Impact Report has been prepared with a view to comply with Namibia's Environmental Assessment Policy of 1995, the Environmental Management Act No. 7 of 2007, Government Notice No. 29 of 2012 (Listed Activities) and the Government Notice No. 30 of 2012 (EIA Regulations).

2. EMP SCOPING REPORT OBJECTIVES

The objectives of this plan are to:

- Describe all environmental safeguards and mitigation measures
- provide a monitoring tool for MME and the fuel control body Namco
- minimize negative impacts of the development and operational phases of this project
- enhance the positive impacts
- provide a tool which allows a succession of managers to have a consistent approach to managing the fuel station and associated activities
- meet the requirements of relevant legislation
- allow the Proponent to monitor environmental impacts and
- Create awareness among all staff and key stakeholders (including MME) of the importance of maintaining sound environmental standards in all operations of the filling station.

The strategies employed to achieve the objectives include:

- Ensure that the developer is aware of the provisions of the EMP during the planning phase
- ensure that the EMP is an integral part of the operations procedures for the Filling Station

- incorporate environmental monitoring into the operations of the development and its associated facilities
- create environmental awareness among all staff and
- Use of the EMP as an agenda item for Management.

3. GENERAL REQUIREMENTS FOR IMPLEMENTATION OF THE EMP

3.1 EMP 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.

3.2 Environmental Awareness Training

a) 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.

b) 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. This shall be maintained that during each shift, there shall be a trained staff on duty to lead the safety protocol at the filling station. It is also important for all staff to understand the context of the filling station designs for them to help during any emergency that will need their attention. All development must meet the standard as outlined in the Guideline for the safety of the business and its customers.

3.3 EMP Monitoring

Prior to construction and twice during the construction phase the author will visit the site to monitoring compliance during the planning and construction phases. This report thus only deals with the future development and operational phase included for the planning and building phase.

Due to the above stated, Advance Environmental Consultant (AEC) was appointed by the Proponent to conduct an EMP for the Construction of a Filling Station. In terms of Namibia’s Environmental Management Act (No. 7 of 2007, Section 27(2j)), Government Notice No. 29 Listed Activities, Section 6) and Government Notice No. 30 (EIA Regulations), the above proposed activity constitutes a number of listed activities which require Environmental Clearance.

In line with the above stated laws, this scoping report will address all the necessary key elements in mitigating unforeseen circumstances.

Filling Station Structures

Government Notice.	Activity Number	Listed Activity
4878	29 (1)	The construction of filling stations, including associated structures and infrastructure, or any other facility for the Underground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin.
4878	29 (5)	The transformation of undeveloped, vacant or derelict land to – (b) Residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 hectare.

In line with the Namibia’s Petroleum Product and Energy Act 13 of 1990 Section 4 (1) Any person desiring to operate a retail outlet shall apply to the Minister for a retail license by duly completing Form PP/1 as set out in Annexure B, and shall lodge such application with the Minister together with such other documents or records as may be required by these Regulations.

Section 4

(2) an application for a retail license shall be accompanied by –

Subsection 2

(c) if an environmental impact assessment study has been conducted, a certified copy of the document setting out the outcome of such study

41.

(1) All buildings, roadworks, structures and plant erected or used in connection with petroleum products by a license holder or certificate holder shall comply with these Regulations and all other applicable laws.

(2) Buildings, roadworks, structures and plant used in connection with petroleum products by a license

holder or certificate holder shall be erected, executed and maintained in such a manner as

- (a) to avoid endangering the safety or health of any person, or the safety of any person's property and
- (b) to prevent the risk of significant environmental harm.

1.2 Project Proponent

Inclusive interpriceses cc is known to be a food supplier company that operates under Mr. Tjikundu katjia kulunga. inclusive investment cc 1 is truly a Namibian own company. The company has been operating in Namibia for 20 years now. The company doesn't have any history of running oil based business, Good hope will operate the business in partnership with Acer petroleum pty ltd the company responsible for supplying fuel an international company that have been operation in Namibian for 4 years now. Acer petroleum pty ltd own for than 100 filling stations in Africa and 8 filling station in Namibia.

1.3 Scope of the EMP

Advance Environmental Consultant (AEC) undertook to carry out and draft the EMP following a well defined framework. Owing to the importance of Interested and Affected Parties (I&APs) involvement in environmental studies, the EMP ensures that I&APs concerns are address as consultations were central to every step in the sense that, the approval of the clearance process by MEFT involving the local communities and surrounding business/farm owners .

The EMP comprised of detailed site specific investigations. Details of each process component are elaborated below.

Scoping Exercise

The scoping exercise aimed at identifying and screening all relevant issues related to the project development as well as identifying at the earliest possible time whether any adverse effects existed that could render the proposed project environmentally unacceptable. Specifically, scoping assisted in:

- Focusing the impact assessment on a manageable number of important questions on which decision making is expected to focus
- Ensuring that only key issues and reasonable alternatives are examined and,
- Identifying fatal flaws in the proposed project

planning.

Existing Environmental Conditions

To establish prevailing environmental conditions for the project area, environmental and

Socio!economic data including surrounding areas was collected, compiled and analyzed. Findings of the analysis are presented in the following Sections. Biological, zoological, botanical and socio-economic studies carried out in the past for the area provided secondary data for the report.

Descriptions of Project Activities

Project inputs, activities and outputs during project preparation, construction and operational life stages were reviewed and are described in this section. This section also includes description of project alternatives.

Analysis of Potential Environmental Impacts

An assessment of environmental effects and benefits of the proposed project regarding biophysical and socioeconomic environment has been undertaken as well as an analysis of the impacts' extent, duration, intensity and significance.

Formulation of Possible Mitigating 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.

Elaboration of an Environmental Management Plan

An Environmental Management Plan (EMP) for implementing the proposed mitigating measures during the project preparation, construction and operation phases of the project was developed. The EMP further indicate management responsibilities and time frames.

1.4 Stakeholder Consultations

AEC's approach to environmental assessment studies is aimed at ensuring that wide stakeholder participation and involvement is achieved. Recognizing this, and as part of the transparent consultative process aimed at taking public views into account in determining the EMP, public consultative meetings were held in Alpha by AEC, the meetings advertised in local Newspapers. The meeting was attended by the local communities

Surrounding opuwo Alpha, participants including representatives from the Traditional Authority, and Regional office.

The Proponent is in possession of a Leasehold certificate for the land were the proponent plan to construct/install te above ground tank the , support letter from the Region and LocalAuthority, Appendix B.

KEY STAKEHOLDERS CONSULTED INCLUDES:

- Constituency office
- community
- Regional office
- Farmer

1.5.1 Methodology

The Interested and Affected Parties (I&APs) consultative process involved meetings, open discussions and interviews with relevant government institutions, local authority and representatives from the villages. Through this interaction the AEC team tried to establish how Interested and Affected Parties understood the dynamics of the environment in which the proposed project is located and any possible underlying causes that could lead to changes over time as a result of implementing the project.

Where the AEC team felt it necessary to go more in depth on a particular matter, Interested and Affected Parties within the project area or surrounding area with either experience or expert knowledge of the study area were identified and interviewed to validate the data already obtained, as well as to get their advice on any additional sources of information that was not readily available. This was useful in interpreting any underlying factors of the trends already observed.

1.5.2 Stakeholder Consultation outcome

The meetings and informal interviews conducted did not raise any objections against the proposed development nor on the site proposed for the facility. The site for the proposed development is within the proponent's own farm.

Authorization requirements for this proposed project include:

- An Environmental Clearance Certificate
- Consent from the – Approval letter (Appendix A)
- Consent from the ^ Approved (Appendix C)

EMP Drafter Team

This chapter is intended to provide details on the organization and the author that undertook the EIA Study as required in terms of (Act no 7 of 2007)

Advanced Environmental Consultant Agency cc is an environmental consulting company whose environmental division comprises 1 individual of which is an Environmental Assessment Practitioners. The environmental division has undertaken over 5 Environmental Impact Assessments for development projects within Namibia.

2.1.1 Details of EAP that prepared the EIA Report

Name: Miss Albertina Simon
Address: P.O. Box 96255
Windhoek
Namibia
OFFICE NO: # 44
Continental building
Independence Avenue
Tel: 081 760 6590
ECmail: albertina_simon@yahoo.com

Albertina Simon

Miss Albertina Simon the owner and founder of Advanced Environmental Agency is an Environmentalist with 3 years' experience in EIA regulation and conservation research support in Namibia. She has served as an environmental officer reviewing applications with environmental issues for different environmental assessment/consulting companies, before embarking on registering her own company as Assistant. Her key expertise includes: Review of Environmental Impact Assessments and related reports, compilation and quality control of records of decision for environmental authorizations, and development of operational guidelines, procedures and templates for administration of environmental applications. She has done 5 successful studies in the past 3 years since she started in 2017.

Table below present the projects successfully prepared by the EIA Practitioner:

Proponent	Project type	Date issued	Registration n#
Acer petroleum Pty Ltd CC	Filling station	2019^10^29	656
Acer Petroleum Pty Ltd CC	Filling station	2020^01^29	657
Acer petroleum Pty LtdCC	Filling station	2020^03^21	874
BV investment cc	Filling station	2018^08	^
Tight investment cc	Filling station	2018^03	^

CHAPTER 2: DESCRIPTION OF PROPOSED PROJECT

2.1 Location

Only one site being considered as set out in Section 3.2 above and shown in this Scoping Report shows the main issues on site selection to be: coordinates 21° 2'15.89"S, 15°31'9.03"E

- Access, from the D3707 turn into the right turn left when coming from kamanjab and to the leftside when coming from opuwo.
- Road safety, owing to the alignments of the D3707.
- The other road safety considerations will be done in line with the Road Authority regulations safety measures.

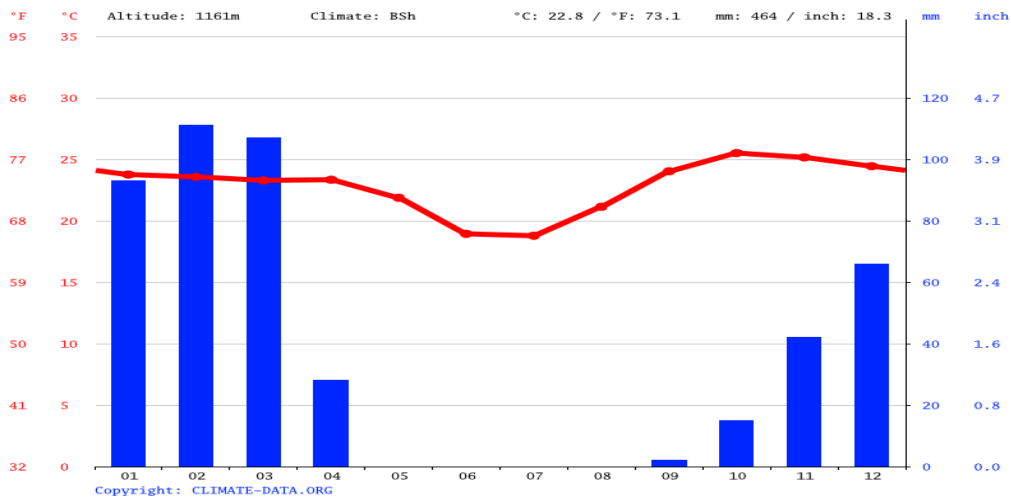
Figure 5: Northern entrance to filling station

The North\eastern entrance and exit from and to the aboveground tank along the road are marginally less risky than the East\northern entrance, but the topography is flat and visible from a distance when joining or exiting the road. For these reasons the east \northern entrance to the filling station need a proper considered to offer a feasible site alternative for consideration.

It is therefore desirable from a planning perspective to locate a mixed retail development within this area.

Rainfall

Alpha a small village situated 15 km before opuwo town in Kunene the region have an average ranges between 250-450mm as else where in the country.these can be very variable temperature range from a maximum average of over 200c winter up to 360 in summer.



Topography

The topography of Kunene region ranges from alritude to altitude of 200m in the central high where the rivers has sources over the.however the proposed filling station is to be located on a flat area at Alpha.

Socio-economic

The small village called Alpha is located in opuwo constituency 95 km to okonguati .opuwo is a home to quiet a huge number of Namibians including our ovahima traditional commuty who remain in the living the origion their culture.the group happens to be the interest of many tourism in the country contributing highly to the economy.the region depents more on farming,tourism nad mining thus the

development of the proposed filling station improve the towns infrastructure ,improve the living standard of the people in the region by creating

Empolyment.Economic sources and development in Kunene region.

2.2 Project Rationale

The company proposed to employ 3 staff on a permanent basis, however it is anticipated that besides the 10 possible direct employment opportunities associated with construction a further 10 to 15 indirect jobs could be generated during this phase of the development. However, it is unlikely that these entire job opportunities will accrued to opuwo residents as much depends on the sourcing of services and skills. The proposed development will create between 2 and 3 permanent jobs associated directly with the operation of the various development components. Afurther 10 to 15 indirect job opportunities are likely to be generated in other sectors servicing in the future.

the development, again it is to be expected that some of these indirect opportunities will accrue to areas near alpha as well as the tourists mostly attracted but the area, this will be a temporary arrangement until such time that people in the vicinity of ALPHA are trained if the skills needed are not readily available when business opens its doors. Taking into consideration the distance the local people and tourists travel before finding another rest place of fuel facility.

2.2 Project Description and Alternatives

2.3.1 Project Description

Application for the Environmental Clearance from the Directorate of Environmental Affairs (DEA) is being made for the Construction/installation of an above ground tank, and other facilities as described above in detail.

Products and services planned to be offered at the proposed aboveground will include the following:

- Service administration area
- dispersing pumps,
- One stop shop.
- Parking space for cars and trucks

Environmentally friendly ablution facilities will be provided, the plot is located 15km before opuwo business center and the site will connect to the water and electricity facilities of opuwo town. The proponent will have to enter an agreement with the opuwo town on how to handle solid waste generated.

Power source or Type

Construction/installation Phase: These will be the only time that high volume of water will be used during the construction since the construction is of temporary as the proponent has plans of constructing a filling station with underground tanks in the future permanent structures using bricks and mortar to build. Thereafter, the usage will be far more sparingly since the area is isolated from the villages, and the shop will sell bottled water for the passer by.

Operational Phase: It is anticipated that the development will attract high number of people, stemming from the local and road users. This though is an ambitious expectation, due low competition from other well established facilities within a 200 km radius from the proposed diesel station proposed, of which the nearest .

The water demand for a typical development station is 1000 l per day per person. The facility therefore is considered to be low on water usage since most of the people only use the ablution and in rare case of truck drivers who will need a stop over to freshen up.

Design and Layout Alternatives

This is being developed and will be done inline within the guideline and policy on filling station as required by MME. Layout of the proposed development is largely dependent on the location of access points from the D3707. The consideration of layout alternatives has thus largely revolved around the assessment of traffic impacts and the consideration of alternative access points. 2.3 Project Site Alternative

The Proponent has no alternatives site. All the marketing, and business viability has been taken into consideration, and that the proposed site is ideal for his business.

2.3 No `Go Alternative

No Go Alternative: If this option is selected, the development or construction of the Filling Station will not proceed. In essence, the no\go alternative would ultimately imply that the state of the environment would be retained as it is presently, with obvious advantages and disadvantages to the natural environment. The Department of Environmental Affairs in the MEFT stresses that the no\go alternative should be considered in cases where the proposed development will have a significant negative impact that cannot be effectively or satisfactorily mitigated against.

CHAPTER 3: LEGAL, REGULATION AND POLICY FRAMEWORK

The Table 1 below summarizes the legislation and policy guidelines that are relevant to the proposed project and is not exhaustive.

Table 1: Relevant legislations and policy guidelines

Title of legislation, policy or guideline	Implications for proposed project (Please read all Acts with their Regulations)
The Namibian Constitution of 1990	The Constitution clearly indicated that the State shall actively promote and maintain the welfare of the people by adopting policies aimed at management of ecosystems, essential ecological processes and biological diversity of Namibia for the benefit of all Namibians, both present and future.
Water Resources Management Act No. 11 of 2013	This Act protects all water resources in Namibia. The Act also laid down conditions to ensure that proper wastewater treatment is provided, including requirement for wastewater discharge permit from the Directorate of Water Affairs.
Environmental Assessment Policy of Namibia (1995)	The Policy seeks to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process, and that the term ENVIRONMENT is broadly interpreted to include biophysical, social, economic, cultural, historical and political components.
Environmental Management Act No. 7 of 2007	The Act provides a list of projects requiring an Environmental Assessment. It aims to promote the sustainable management of the environment and the use of natural resources and to provide for a process of assessment and control of activities which may have significant effects on the environment.
Hazardous Substances Ordinance No. 14 of 1974	<p>The Ordinance applies to the manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export. Its primary purpose is to prevent hazardous substances from causing injury, ill\health or the death of human beings.</p> <p>Hydrocarbons handled during the construction phase may be hazardous thus careful handling and management is vital to prevent spills, explosions, ill\health or death.</p>

Okonguati above ground tank

<p>Pollution Control and Waste Management Bill of 1999</p>	<p>The Bill promote sustainable development and the establishment of the Pollution Control and Waste Management Unit to prevent and regulate the discharge of pollutants to the air, water and land to make provision for the establishment of an appropriate framework for integrated pollution prevention and control to regulate noise, dust and odour pollution to establish a system of waste planning and management and to enable Namibia to comply with its obligations under international law in this regard.</p>
<p>Draft Wetlands Policy of 2004</p>	<p>This policy strives to complement existing policy instruments regarding sustainable development and sound natural resource management in Namibia. Its implementation provides a platform for the conservation and wise use of wetlands, thus promoting inter^a generational equity regarding wetland resource utilization. Furthermore, it facilitate the Nation's efforts to meet its commitments as a signatory to the International Convention on Wetlands (Ramsar) and other Multinational Environmental Agreements (MEA's).</p>
<p>National Waste Management Policy, 2010</p>	<p>This policy is focusing specifically on Waste Management and use of various technologies waste treatment and disposal to minimize health risks. It is also geared to have a unified waste management system country wide. This policy provides the necessary guidance on the processes related to waste management in the MOHSS, wider Namibia health and social welfare sectors, and other relevant stakeholders. It is taking into consideration the process of integrated waste management from generation to final disposal. This practice also focus on medical, household, mining, agricultural, and construction waste.</p>
<p>Forest Act No. 12 of 2001 and its amendments</p>	<p>The purpose of this Act guides the use and management of forestry and related resources. The aims of the forest management as per the Act, is to achieve manage of forest "for which forest resources are managed and developed, including the planting of trees where necessary, to conserve soil and water resources, maintain biological diversity and to use forest produce in a way which is compatible with the Forest's primary role as the protector and enhancer of the natural environment."</p>
<p>National Heritage Act No. 27 of 2004</p>	<p>The Act provide for the protection and conservation of places and objects of heritage significance and the registration of such places and objects to establish a National Heritage Council to establish a National Heritage Register and to provide for incidental matters.</p>
<p>Labor Act No. 11 of 2007)</p>	<p>Consolidate and amend the labor law to establish a comprehensive labor law for all employers and employees to entrench fundamental labor rights and protections to regulate basic terms and conditions of employment to ensure the health, safety and welfare of employees to protect employees from unfair labor practices to regulate the registration of trade unions and employers' organizations to regulate collective labor relations to provide for the systematic prevention and resolution of labor dispute to establish the Labor Advisory Council, the Labor Court, the Wages Commission and the labor inspectorate to provide for the appointment of the Labor Commissioner and the Deputy Labor Commissioner and to provide for incidental matters.</p>
<p>Public Health Act, No. 36 of 1919 and Amendments and Regulations</p>	<p>This Act makes provision for the prevention and control of infectious diseases, venereal diseases and epidemics. It also regulates sanitation, food and public water supplies.</p>

CHAPTER 4: DESCRIPTION OF EXISTING ENVIRONMENT

Appropriate standard methodologies were used to describe the existing environment. These included undertaking an inventory of the physical and biological environments, conducting interviews and reviewing of relevant literature. In addition, mapping of the project area was done using a hand-held GPS unit and plotted on Google Earth.

Objective	Management Measure	Monitoring Action & Method	Responsibility	Progress 10 th June
Environmental Clearance	Apply for environmental Clearance	File clearance	Proponent	Completed, EMP approved, clearance certificate issued
Adhering to EMP Requirements	EMP should be shared and Discussed prior to layout of building.	Site plan to ensure that layout of buildings reduces visual impact as per the Scoping Report	Proponent	The Proponent has appointed a person (Juan Marx) to Oversee all building operations. He has a copy of the EMP and it is apparent that it is used.
	Organize an awareness meeting with all building staff to ensure awareness and the need for compliance with EMP	Complete EMP awareness training	Contractor	This happens on an ongoing basis. proponent discusses with the sub? Contractors responsible for the filling station structures the layout and together the areas are demarcated with tape. General workers may need to be informed as to why an EMP is important.
Socioeconomic benefits				
Conserve existing Vegetation	Layout & design should incorporate the existing trees	Layout & design complies with proposed mitigation. Large specimen trees must not be removed	Contractor/Proponent	Yes, carefully demarcated. See photo 1.
Minimize land degradation & erosion	Improve the access road to ensure least possible waterlogging threat (drainage structures to be built where required)	Monitor accessibility	Contractor	The Proponent has ordered culverts for the section of the track most prone to water? Logging.

	Position car park using, as far as possible, existing demarcated areas	Minimum disturbance of site	Contractor	This will be done towards the end of the construction period.
	Materials color should blend in with the site	Discussions between Proponent and suppliers	Contractor	The main structures bricks and mortar which will blend with existing vegetation.
Minimize impact on energy resources	Design energy systems which use, as far as possible, renewable energy	Cost benefit analysis of most appropriate systems BUT which excludes the use of wood for heating (gas entirely acceptable)	Proponent Electrician	a) A centralized solar installation shall be installed for electricity with a generator as a backup when cloud cover reduces power generation. b) Gas shall be used for cooking. c) Hot water shall be heated via solar geysers. d) Water extraction form backwater shall be by a solar powered pump.
Minimize impact on water resources	Use water? Saving devices in toilets and low? Flow shower heads	Specified in details	Contractor	Procurement not yet finalized
	Specify water meters to monitor water consumption	Specified in details	Contractor	A single water meter shall be installed
	Place sewerage systems to ensure such that potential for contamination of ground water is minimized	Septic tanks to be positioned out of floodplain waterlogged zone and French drains located in well? Drained soils.	Contractor	A septic tank and soak Away. Soak Always, however, need a new design as simply a 2x2x2 meter pit at present. The site manager, however, is open to suggestions and a design which follows "best practice" has been shared with him.
	Grey waste water disposal system to be built as should not be piped to septic tanks	French drains to be positioned in well\Drained soil. MET (or agent to approve lay? Out)	MET (or agent to approve lay? out)	Design has incorporated this
	Fat traps to be installed at scullery/kitchen	Ensure that specified in details	Proponent	These have been purchased but plumbing still to be done.

Objective	Management Measure	Monitoring Action & Method	Responsibility	Progress
To ensure that provisions of the EMP are implemented during	Contractor to report at every site meeting with local authority and the proponent	Included in site meeting notes	Proponent	Proponent's agent noted all comments and requested information on soak Always which has been forwarded to him.

Construction	representative (or representative) on implementation of EMP			
	Contractor to conduct training & awareness for workers	Workers awareness & training meeting	Proponent	Ongoing but probably reasons for an EMP require further Awareness training.
	Copy of EMP included as part of contractor's instructions and available to all staff and sub? Contractors	EMP available on site	Proponent	The Proponent is managing a team of subcontractors but person responsible for oversight has a copy of the EMP which is used.
	A signoff procedure should there be any change to the EMP or should there be any deviation from the clauses or intention of the EMP	Updates and instructions included in construction instructions	Contractor	There has only been one nonsignificant deviation – concrete slabs (100 mm) cast for service areas but this offset by no use of concrete in bungalows.
Minimize damage to environment during construction	Demarcate area which shall be subjected to disturbance	Common understanding on extent of construction area	Contractor	Done – see photo 2.
	Detailed instructions to be issued on rehabilitation of disturbed areas	Instructions shared with contractor	Contractor	Will be done once construction nears completion.
	Protection of woody plants. Where possible these should be incorporated into the design	Compliance with contractor instructions	Contractor	Yes, done. See photo 1.
	Wildlife not to be disturbed, trapped or killed and any offender shall be reported to MEFT for further action	Incidents to be recorded and reported to MEFT and other Law enforcement agents	Contractor	Will be observed throughout the construction and operational phase
	To minimize soil or water Pollution	Spillages of potentially harmful substances must be cleared immediately and disposed of at an appropriate site	Contractor	Spillages to be report.
	To ensure that sound waste management is practiced during the construction phase and should be classified as industrial (oil, metal and chemical based materials)_ solid waste (normal household waste) and human waste (sewerage)	Management & disposal of waste is undertaken on the principle of removal from the site and disposal at an appropriate dump	Contractor	a) All waste taken to Eenhan1a dumpsite b) A new design for soak away for septic tanks required and this has been shared with the Proponent on 11 th March. See photo 4 for existing soak\ Away hole and the damp towards the bottom of the hole. A long narrow and shallower soak\ Away shall be a better solution and the site manager has willingly agreed to alter the design.
	Servicing of vehicles and equipment not undertaken on site	Servicing outsourced to off-site service providers	Contractor	Vehicles serviced off site.

4.3 Operational Phase

Objective	Management Measure	Monitoring Action & Method	Responsibility	Findings
To ensure that EMP and the	EMP & Scoping Report	Contract which aligns EMP &	Proponent	

Scoping Report understood by management & staff	incorporated into contract of Filling Station Manager	Scoping Report		
	Staff receive training and understand the implications and reasons for the EMP	Training held & roles and responsibilities of various staff members clearly spelt out and included in job descriptions	Service Manager	
Minimize impacts on vegetation	Existing vegetation in proposed construction area is not removed except where it is a hindrance to operations	Conduct regular inspections and keep staff informed	Filling station Manager	
	Introduced ornamental plants must only be indigenous to the Area	N/A	Filling Station Manager	
	Staff do not fell trees or damage vegetation	Inform staff of policy as well as the repercussions should there be noncompliance. Include in code of conduct for staff	Filling Station Manager	
	Track network at the site is confined and that no new tracks developed without authority from MET	Inform staff and self\drive guests	Filling Station Manager	
Minimize land degradation & erosion	Rainfall run\off at Filling Station does not cause undue erosion	Regular inspections and if required remedial contouring or drainage	Filling Station Manager	
To preserve scenic quality & "sense of place"	Mitigation measures implemented during construction phase are maintained	Regular inspections of screens etc. hiding services & installations are	Filling Station Manager	

		functional and if required repair		
Minimize impact on water resources	Staff are aware of the need to not use water wastefully	Undertake staff training	Filling Station Manager	
	Water usage & consumption is within the "best practice guidelines"	Monitor water usage on a monthly basis and calculate usage per client and for staff members and compare against targets	Filling Station Manager	
	There is no leakage from water systems	Undertake regular inspections of all water pipes	Filling Station Manager	
Minimize soil & water pollution	Spillages of potentially harmful substances must be cleared immediately and disposed of at an appropriate site	Inspection and follow up clean ups if required	Filling Station Manager	
	Functional septic tanks	Undertake regular inspections and, if required, DE? Sludge	Filling Station Manager	
	Functional fat traps	Inspect & clean on a regular basis and store matter in sealed containers	Filling Station Manager	
	Functional soak? Always	Inspect on a regular basis	Filling Station Manager	
	Functional and leak? Free waste	Inspect on a regular basis on	Filling Station Manager	

	water pipes	repair if required		
	Use of environment Friendly soaps & detergents	Ensure that procurement specifies this need	Filling Station Manager	
	No contamination of soil or water by fuels or oil	Ensure that all fuels stored and managed to reduce risk of spillages	Filling Station Manager	

CHAPTER 5. ENVIRONMENTAL MONITORING AND SOCIOECONOMIC IMPACT (Operational Phase)

The following represents key monitoring activities but Filling Station management may add as the need arises

Note: Most of the monitoring is the responsibility of the manager BUT he/she may delegate as required but those responsible need to have the task included in job description

To be Monitored	What needs to be monitored	Frequency	Responsibility	Findings
Water consumption	Liters used per guest/staff/services	Monthly	Station Manager	
Sewerage system	Sewage pipes	Every three months	Station Manager	
Sewerage pipes	Leaks	Monthly	Station Manager	
Grey water pipes	Leaks	Monthly	Station Manager	
Fat traps	Functioning equipment	Weekly	Station Manager	
Water installations	Functioning of purification equipment	Weekly	Station Manager	
Soak Always	Drainage	Weekly	Station Manager	
Tracks	Erosion	Monthly but more intensively after rainfall events	Station Manager	

4.3 Operational Phase

Objective	Management Measure	Monitoring Action & Method	Responsibility	Findings
To ensure that EMP and the Scoping Report understood by management & staff	EMP & Scoping Report incorporated into contract of Filling Station Manager	Contract which aligns EMP & Scoping Report	Proponent	
	Staff receive training and understand the implications and reasons for the EMP	Training held & roles and responsibilities of various staff members clearly spelt out and included in job descriptions	Filling Station Manager	
To ensure that the agreed socioeconomic benefits of the (if a contract exist) are achieved	Implement contract monitoring tool			
Minimize impacts on vegetation	Existing vegetation in Filling Station area is not removed except where it is a hindrance to operations	Conduct regular inspections and keep staff informed	Filling Station Manager	
	Introduced ornamental plants must only be indigenous to the area	N/A	Filling Station Manager	
	Staff do not fell trees or damage vegetation	Inform staff of policy as well as the repercussions should there be none Compliance. Include in code of conduct for staff	Filling Station Manager	
Minimize land degradation & erosion	Rainfall runoff at Filling Station does not cause undue erosion	Regular inspections and if required remedial contouring or drainage	Filling Station Manager	
	Ensure that tracks used exclusively for Filling Station activities are not subjected to erosion or excessive	Undertake inspections regularly and, if required, install additional drainage or undertake whatever repairs	Filling Station Manager	

	waterlogging	required to		
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		renabitate and reduce erosion		
To preserve scenic quality & "sense of place"	Mitigation measures implemented during construction phase are maintained	Regular inspections of screens etc. hiding services & installations are functional and if required repair	Filling Station Manager	
Minimize impact on water resources	Staff are aware of the need to not use water wastefully	Undertake staff training	Filling Station Manager	
	Water usage & consumption is within the "best practice guidelines"	Monitor water usage on a monthly basis and calculate usage per guest and for staff members and compare against targets	Filling Station Manager	
	There is no leakage from water systems	Undertake regular inspections of all water pipes	Filling Station Manager	
Minimize soil & water pollution	Spillages of potentially harmful substances must be cleared immediately and disposed of at an appropriate site	Inspection and follow up cleanups if required	Filling Station Manager	
	Functional septic tanks	Undertake regular inspections and, if required, dislodge	Filling Station Manager	
	Functional fat traps	Inspect & clean on a regular basis and store matter in	Filling Station Manager	

		sealed containers		
	Functional soak always	Inspect on a regular basis	Filling Station Manager	

	Functional and leak free waste water pipes	Inspect on a regular basis on repair if required	Filling Station Manager	
	Use of environment friendly soaps & detergents	Ensure that procurement specifies this need	Filling Station Manager	
	No contamination of soil or water by fuels or oil	Ensure that all fuels stored and managed to reduce risk of spillages	Filling Station Manager	

5. Environmental Monitoring (Operational Phase)

The following represents key monitoring activities but Filling Station management may add as the need arises
Note: Most of the monitoring is the responsibility of the manager BUT he/she may delegate as required but those responsible need to have the task included in job description

To be Monitored	What needs to be monitored	Frequency	Responsibility	Findings
Water consumption	Liters used per guest/staff/services	Monthly	Filling Station Manager	
Sewerage pipes	Leaks	Monthly	Filling Station Manager	
Grey water pipes	Leaks	Monthly	Filling Station Manager	
Fat traps	Functioning equipment	Weekly	Filling Station Manager	
Water installations	Functioning of purification equipment	Weekly	Filling Station Manager	
Soak aways	Drainage	Weekly	Filling Station Manager	
Tracks	Erosion	Monthly but more intensively after rainfall events	Filling Station Manager	

Table 2: Criterion and classification of impacts

Assessment Evaluation Criteria	Rating (Severity)	
	Impact Type	A
=		No Impact or Negligible Impact
+		Positive
Extent of impact	I	Immediate (the site and immediate surroundings)
	L	Local
	R	Regional
	N	National
	IT	International
	ST	Short term (0F5 years)

Duration of impact	MT	Medium term (5F15 years)
	LT	Long term (lifetime of the development)
Intensity of impact	L	Low (where natural, cultural and social functions and processes are not affected)
	M	Medium (where the affected environment is altered but natural, cultural and social functions and processes can continue)
	H	High (where the affected environment is altered to the extent that natural, cultural and social functions and processes will temporarily or permanently cease).

Probability of impact	LP	Low probability (possibility of impact occurring is low)
	P	Probable (where there is a distinct possibility that it will occur)
	HP	Highly probable (where the impact is most likely to occur)
	D	Definite (where the impact will occur)
Significance of impact	L	Low (where natural, cultural and social and economic functions and processes are not affected). In the case of adverse impacts, mitigation is either easily achieved or little will be required, or both. In the case of beneficial impacts, alternative means of achieving this benefit are likely to be easier, cheaper, more effective and less time consuming
	M	Medium (where the affected environment is altered but natural, cultural, social and economic functions and processes can continue). An impact exists but is not substantial in relation to other impacts that might take effect within the bounds of those that could occur. In the case of Beneficial impacts, other means of achieving this benefit are about equal in time, cost and effort.
	H	High (where the affected environment is altered to the extent that natural, cultural, social and economic functions and processes will temporarily or permanently cease). In the case of adverse impacts, there is no possible mitigation that could offset the impact, or mitigation is difficult, expensive, time consuming or a combination of these. In the case of beneficial impacts, the impact is of a Substantial order within the bounds of impacts that could occur.

5.1 Potential Impacts

5.5.1 Socio-Economic Impacts

Impact: Increased Employment Opportunities

The development will create additional job opportunities for the local community members of the region and community and the surrounding village residents. At preparatory, construction and operational stages, local Community members will be employed and consequently livelihood support for family members will be improved (shortNterm and longNterm) – in particular as on average support from one job benefits five family members.

Impact: Increase in Local Population

The development will not have a significant impact on the population size of the area. The proposed development will source a very small number of highly skilled personnel from outside the Constituency during the construction phases. All semiskilled and unskilled staff will be employed from the Constituency and appropriate training will be provided. Human presence in the remote project site will though increase. It is not expected that this increase of human presence will significantly negatively impact in the area. It is however expected that this increased human presence financial injection into the local business of the otjikakanane settlement and its surroundings.

Impact: Increase in Local Economic Activities

Trading opportunities among the local people are expected to increase. Food and other household necessities will be sold to the construction staff, providing both a shortNterm and longNterm positive economic activity. Increased employment numbers within the Constituency will also support local trade through increased income in the area, including sale of hand crafts.

Impact: Water Supply Availability

The development is unlikely to put pressure on water demand in the area and will not overwhelm the groundwater resources, as clients are just stopping over for fuel and relaxation and proceed to their destinations.

Impact: Loss on Cultural Site

No significant impact determined.

Impact: Increased Demand for Health Services

During construction and operations, all occupational health related injuries will be referred to the local health facilities for immediate attention, in opuwo. This will not have a significant impact on the capacity of the staff and facilities to meet the demand for health care, since most of the employed people will be from the area and already reside there. HIV and AID programs for the Contractors, and for the local communities will need to be developed and provide so to ensure that all participating people are not exposed to increased risk of HIV/AIDS spread.

Impact: Worker Safety

During the construction and operation phases, light to heavy machinery will be employed for the digging and putting up associated infrastructure. Absence of clear safety guidelines may lead to accidents affecting worker's safety and productivity, however, this will not be the case during the construction of this development and clear safety guidelines will be available and all workers will be briefed and trained accordingly, taking into consideration that the activity is place alongside a highway.

Impact: Increased Traffic

Increased traffic flow in and out of the area is expected during construction and operations. During operations, this increase is expected to be high as service will be available to the road user, and that it is no more a remote route from the outsider and slight increase in local traffic can be expected.

Impact: Blasting noise and vibration

There is a possibility of blasting that might take place during the construction depending on the type of underground layers that will be encountered. However limited vibrations from machinery and tools could be perceived as intrusion. This will only occur during limited construction time.

5.5.2 Environmental Impacts

Impact: Displacement of people

No impact, as it is owned by the town council.

Impact: Machinery noise and vibration

During the construction and operational phases, noise and vibrations from the vehicles and machineries will result into noise and vibration. This impact will be insignificant to Wild animals. The construction workers are the most vulnerable and therefore they should wear protective gear.

Impact: Water quality

No impact.

Impact: Solid Waste Disposal

Waste will be produced at the site during the setting up of supporting infrastructure and digging trenches for the pipeline. Piles of sand cleared or dug out are not environmental pollutant hazard, but can reduce the area aesthetics value, therefore it will be done with little to no significant and site to restore in a shortest time less than a year.

Impact: Air Pollution

The major source of the impact will be dust from vehicles ferrying materials, possible blasting. However most of the material will be ferried via the tarred road which has less dust apart from burning of fuel, this impact is insignificant. Care should be taken not to expose workers to excessive dust and exhaust fumes.

Impact: Loss of Historical and Cultural Site:

There are no existing historical and cultural site within the site or in its immediate surrounding environment.

Impact: Loss of Productive Land

The plot is situated in a settlement area therefore will be a loss or impact on wildlife being that site is located in settlement area.

Impact: Loss of Wildlife Habitat, Indigenous Flora and Fauna

The project site will not interfere directly with any existing stock live that currently use the grazing land illegal, there are no wildlife since the plot is within town and completely cleared and serviced.

Impact: Erosion of the Topsoil

The nature of the project demands the use of machinery during construction. There will be soil removed for the development that might cause erosion. However, the nature of development requires such activity to be performed. Unless rehabilitation is not done properly after construction and no regular maintenance is carried out during the operational phase of the project.

Impact: Siltation and Sedimentation

the nature of business will not require segmentations.

Impact: Soil degradation

No impact on a larger scale, only the development site

The following Tables below present the proposed impact analysis.

Table 3: Evaluation of impacts during preconstruction phase

PRECONSTRUCTION PHASE							
Identified Impact	Impact Type	Extent	Duration	Intensity	Probability	Significance	
						Unmitigated	Mitigated
Surface water pollution	=						
Ground water pollution	=						
Soil erosion	=						
Soil pollution	=						
Air pollution	=						
Land use potential	=						
Habitat transformation	=						
Fauna displacement	=						
Damage to Flora	=						
Traffic impacts	=						
Visual & aesthetic Impacts	=						
Social	+	L	ST	M	D	L	M
Economic	+	L	ST	M	D	L	M

Table 4: Evaluation of impacts during construction phase

CONSTRUCTION PHASE							
Identified Impact	Impact Type	Extent	Duration	Intensity	Probability	Significance	
						Unmitigated	Mitigated
Surface water pollution	=						
Ground water pollution	=						
Soil erosion	A	I	ST	L	LP	L	=
Soil pollution	A	I	ST	L	LP	L	=
Air pollution	A	I	ST	L	P	L	=
Land use potential	A	I	ST	L	P	L	=
Habitat transformation	=						
Fauna displacement	A	I	ST	L	LP	L	=
Damage to Flora	=						
Traffic impacts	A	I	ST	L	P	L	=
Visual & aesthetic Impacts	A	I	ST	L	P	L	=
Social	+	L	ST	M	D	M	H
Economic	+	L	ST	M	D	M	H

Table 5: Evaluation of impacts during operational phase

OPERATIONS PHASE							
Identified Impact	Impact Type	Extent	Duration	Intensity	Probability	Significance	
						Unmitigated	Mitigated
Surface water pollution	=						
Ground water pollution	=						
Soil erosion	A	I	ST	L	P	L	=
Soil pollution	A	I	ST	L	P	L	=
Air pollution	=						
Land use potential	+	L	LT	M	D	M	L
Habitat transformation	=						
Fauna displacement	=						
Damage to Flora	=						
Traffic impacts	=						
Visual & aesthetic Impacts	+	L	LT	M	D	M	H
Social	+	L	LT	M	D	M	H
Economic	+	N	LT	M	D	M	H

CHAPTER 6: ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN (EMP)

From the above identification of adverse and positive impacts measures have been proposed for mitigation. In order to achieve this, an Environmental Management Plan (EMP) has been developed as part of this document.

CHAPTER 7: CONCLUSION

A project of this magnitude will bring with it both positive and negative environmental and socioeconomic impacts. These can be localized to the project site or can also affect areas within the project's vicinity. While positive impacts from this development are expected to affect the wider Conservancy and its members, the adverse effects can be considered much localized. For this development project, the positive impacts outweigh the negative impacts to which amelioration measures have been proposed to cushion their impacts.

Therefore, we recommend that the project be considered for approval for implementation, especially since the proposed site for the construction development is not a sensitive site, and unlikely to generate long term significant negative impacts.

This Scoping Report has revealed that a full EIA will not be required in order to identify gaps in information or to accurately identify all project's aspects that could generate significant negative impacts.

APPENDICES

- APPENDIX A: Letter from
- APPENDIX A1: Design or layout of the Filling station
- APPENDIX B: Proponents Leasehold/Contract
- APPENDIX C: letter from
- APPENDIX D: CV. Albertina Simon/COMPANY PROFILE

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