

APP-003312
CONSTRUCTION AND OPERATIONS OF A FUEL DEPOT IN
OPUWO, KUNENE REGION
ENVIRONMENTAL ASSESSMENT SCOPING REPORT



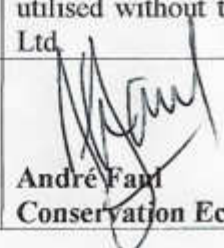
Assessed by:



Assessed for:


Teuefi Trading CC

February 2022

Project:	CONSTRUCTION AND OPERATIONS OF A FUEL DEPOT IN OPUWO, KUNENE REGION: ENVIRONMENTAL ASSESSMENT SCOPING REPORT	
Report: Version/Date:	Final February 2022	
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Report Approval	 André Faul Conservation Ecologist	

I Wouter Smith acting as Teuefi Trading CC hereby confirm that the project description contained in this report is a true reflection of the information which the Proponent provided to Geo Pollution Technologies. All material information in the possession of the proponent that reasonably has or may have the potential of influencing any decision or the objectivity of this assessment is fairly represented in this report and the report is hereby approved.

Signed at Windhoek on the 14 day of FEBRUARY 2022.


 Teuefi Trading CC

CC/2011/4357
 Business Registration/ID Number

EXECUTIVE SUMMARY

Teuefi Trading CC requested Geo Pollution Technologies (Pty) Ltd to undertake an environmental assessment for the construction and operations of a **new** fuel wholesale facility (depot) on Portion F of Opuwo Town and Townlands No.876, Opuwo, in the Kunene Region. The Opuwo fuel depot will form part of the NAMCOR franchise, and will include a fuel wholesale facility (diesel only) and the sale of oils and lubricants. Construction activities will include the installation of an aboveground storage tank, all reticulation and a spill slab area with a pump island. Operations of the fuel wholesale facility will include filling of the aboveground storage tanks from road transport tankers, dispensing of fuel to customers, tank dips and fuel volume reconciliation, as well as general operational activities and maintenance procedures associated with a fuel wholesale facility and associated infrastructure.

The environmental assessment is conducted to determine all environmental, safety, health and socio-economic impacts associated with the construction and operations of the facility. Relevant environmental data has been compiled by making use of secondary data and from a reconnaissance site visit. Potential environmental impacts and associated social impacts were identified and are addressed in this report.

The proposed facility is surrounded mainly by properties of different land use including a kindergarten, abattoir and residential units, all which fall under the jurisdiction of the Opuwo Town Council. Due to the nature and location of the facility, limited impacts are expected on the surrounding environment, see summary impacts table below. It is however recommended that environmental performance be monitored regularly to ensure regulatory compliance and that corrective measures be taken if necessary. The construction of a new fuel wholesale facility will play a positive role in contributing to a reliable supply of fuel to the town and region's business, transport and tourism industry.

The major concerns related to the construction and operations of the fuel wholesale facility are that of potential groundwater, surface water and soil contamination and the possibility of fire. This will however be limited by adherence to relevant South African National Standards and Material Safety Data Sheet instructions. Furthermore, noise levels should meet the minimum requirements of the World Health Organisation. By appointing local contractors and employees and by implementing educational programs the positive socio-economic impacts can be maximised while mitigating any negative impacts.

The environmental management plan included in Section 10 of this document should be used as an on-site reference document during all phases (planning, construction, operations and decommissioning) of the facility. All monitoring and records kept should be included in a report to ensure compliance with the environmental management plan. Parties responsible for transgression of the environmental management plan should be held responsible for any rehabilitation that may need to be undertaken. A Health, Safety, Environment and Quality policy could be used in conjunction with the environmental management plan. Operators and responsible personnel must be taught the contents of these documents. Local or national regulations and guidelines must be adhered to and monitored regularly as outlined in the environmental management plan.

Impact Summary Class Values

Impact Category	Impact Type	Construction		Operations	
<i>Positive Rating Scale: Maximum Value</i>		5		5	
<i>Negative Rating Scale: Maximum Value</i>			-5		-5
EO	Skills, Technology and Development	2		2	
EO	Revenue Generation and Employment	2		2	
SC	Demographic Profile and Community Health		-1		-2
EO	Fuel Supply			2	
SC	Traffic		-1		-1
SC	Health, Safety and Security		-2		-2
PC	Fire		-3		-3
PC	Air Quality		-1		-1
PC	Noise		-2		-1
PC	Waste Production		-2		-2
BE	Ecosystem and Biodiversity Impact		-1		-1
PC	Groundwater, Surface Water and Soil Contamination		-2		-3
EO	Impacts on Utilities and Infrastructure		-2		-2
SC	Visual Impact		-1		-1
	Cumulative Impact		-2		-2

BE = Biological/Ecological EO = Economical/Operational PC = Physical/Chemical SC = Sociological/Cultural

TABLE OF CONTENTS

1	BACKGROUND AND INTRODUCTION	1
2	SCOPE	2
3	METHODOLOGY	2
4	FACILITY CONSTRUCTION, OPERATIONS AND RELATED ACTIVITIES	2
4.1	PLANNED INFRASTRUCTURE	2
4.2	OPERATIONAL ACTIVITIES	4
5	ALTERNATIVES TO THE PROPOSED FACILITY	4
6	ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS	4
7	ENVIRONMENTAL CHARACTERISTICS	7
7.1	LOCALITY AND SURROUNDING LAND USE	7
7.2	CLIMATE	8
7.3	TOPOGRAPHY AND DRAINAGE	9
7.4	GEOLOGY AND HYDROGEOLOGY	11
7.5	PUBLIC WATER SUPPLY	14
7.6	FAUNA AND FLORA	14
7.7	DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS	15
7.8	CULTURAL, HERITAGE AND ARCHAEOLOGICAL ASPECTS	15
8	PUBLIC CONSULTATION	16
9	MAJOR IDENTIFIED IMPACTS	16
9.1	HYDROCARBON POLLUTION	16
9.2	NOISE IMPACTS	17
9.3	TRAFFIC IMPACTS	17
9.4	FIRE	17
9.5	HEALTH	18
9.6	ECOSYSTEM AND BIODIVERSITY IMPACT	18
9.7	SOCIO-ECONOMIC IMPACTS	18
10	ASSESSMENT AND MANAGEMENT OF IMPACTS	18
10.1	RISK ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN	19
10.1.1	<i>Planning</i>	20
10.1.2	<i>Skills, Technology and Development</i>	21
10.1.3	<i>Revenue Generation and Employment</i>	22
10.1.4	<i>Demographic Profile and Community Health</i>	23
10.1.5	<i>Fuel Supply</i>	24
10.1.6	<i>Traffic</i>	25
10.1.7	<i>Health, Safety and Security</i>	26
10.1.8	<i>Fire</i>	27
10.1.9	<i>Air Quality</i>	28
10.1.10	<i>Noise</i>	29
10.1.11	<i>Waste production</i>	30
10.1.12	<i>Ecosystem and Biodiversity Impact</i>	31
10.1.13	<i>Groundwater, Surface Water and Soil Contamination</i>	32
10.1.14	<i>Visual Impact</i>	34
10.1.15	<i>Impacts on Utilities and Infrastructure</i>	35
10.1.16	<i>Cumulative Impact</i>	36
10.2	DECOMMISSIONING AND REHABILITATION	37
10.3	ENVIRONMENTAL MANAGEMENT SYSTEM	37
11	CONCLUSION	37
12	REFERENCES	39

LIST OF APPENDICES

APPENDIX A:	PROOF OF PUBLIC CONSULTATION	40
APPENDIX B:	CONSULTANT’S CURRICULUM VITAE.....	50

LIST OF FIGURES

FIGURE 1-1.	PROJECT LOCATION.....	1
FIGURE 4-1.	PRELIMINARY SITE LAYOUT.....	3
FIGURE 7-1.	SURROUNDING LAND USE	7
FIGURE 7-3.	DAILY AND SEASONAL RAINFALL (FUNK ET AL., 2015)	9
FIGURE 7-4.	TOPOGRAPHY, DRAINAGE AND AGRO ECOLOGICAL ZONES	10
FIGURE 7-5.	DRAINAGE DIRECTION AND SLOPE.....	11
FIGURE 7-6.	GEOLOGY OF THE AREA	12
FIGURE 7-7.	DOMINANT ROCK AND SOIL TYPES	13
FIGURE 9-1.	CONCEPTUAL LNAPL RELEASE TO THE VADOSE ZONE	17

LIST OF TABLES

TABLE 6-1.	NAMIBIAN LAW APPLICABLE TO THE FUEL WHOLESALE FACILITY.....	4
TABLE 6-2.	RELEVANT MULTILATERAL ENVIRONMENTAL AGREEMENTS FOR NAMIBIA AND THE DEVELOPMENT	6
TABLE 6-3.	STANDARDS OR CODES OF PRACTISE	6
TABLE 7-1.	SUMMARY OF CLIMATE DATA FOR THE AREA (ATLAS OF NAMIBIA PROJECT, 2002). 8	
TABLE 7-2.	RAINFALL STATISTICS (FUNK ET AL., 2015)	8
TABLE 7-3.	GROUNDWATER BOREHOLE STATISTICS FOR THE AREA	13
TABLE 7-4.	GENERAL FLORA DATA (ATLAS OF NAMIBIA PROJECT, 2002)	14
TABLE 7-5.	GENERAL FAUNA DATA (ATLAS OF NAMIBIA PROJECT, 2002).....	14
TABLE 7-6.	DEMOGRAPHIC CHARACTERISTICS OF OPUWO CONSTITUENCY, THE KUNENE REGION AND NATIONALLY (NAMIBIA STATISTICS AGENCY, 2011).....	15
TABLE 10-1.	ASSESSMENT CRITERIA	18
TABLE 10-2.	ENVIRONMENTAL CLASSIFICATION (PASTAKIA 1998)	19
TABLE 11-1.	IMPACT SUMMARY CLASS VALUES	38

LIST OF PHOTOS

PHOTO 1.	EXISTING INFRASTRUCTURE ON SITE.....	3
PHOTO 2.	POWERLINE WEST OF THE SITE	3
PHOTO 3.	ABATTOIR NEXT TO SITE.....	8
PHOTO 4.	BUSINESS LOCATED SOUTH OF THE SITE.....	8
PHOTO 5.	DRAINAGE LINE SOUTH OF THE SITE	10
PHOTO 6.	DRAINAGE LINE VEGETATION SOUTH OF THE SITE	10
PHOTO 7.	VEGETATION ON AND NEXT TO SITE	15
PHOTO 8.	VEGETATION ON AND NEXT TO SITE	15

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
BE	Biological/Ecological
DWA	Directorate of Water Affairs
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EMA	Environmental Management Act No 7 of 2007
EMP	Environmental Management Plan
EMS	Environmental Management System
EO	Economic/Operational
ES	Environmental Classification
GPT	Geo Pollution Technologies
HIV	Human Immunodeficiency Virus
IAPs	Interested and Affected Parties
IUCN	International Union for Conservation of Nature
LNAPL	Light Non-Aqueous Phase Liquids
mamsl	Meters Above Mean Sea Level
m/s	Metre per second
mbs	Metres below surface
MEFT	Ministry of Environment, Forestry and Tourism
mm/a	Millimetres per annum
MSDS	Material Safety Data Sheet
PC	Physical/Chemical
PPE	Personal Protective Equipment
ppm	Parts per million
SANS	South African National Standards
SC	Sociological/Cultural
UNFCCC	United Nations Framework Convention on Climate Change
WHO	World Health Organization

GLOSSARY OF TERMS

Alternatives - A possible course of action, in place of another, that would meet the same purpose and need but which would avoid or minimize negative impacts or enhance project benefits. These can include alternative locations/sites, routes, layouts, processes, designs, schedules and/or inputs. The “no-go” alternative constitutes the ‘without project’ option and provides a benchmark against which to evaluate changes; development should result in net benefit to society and should avoid undesirable negative impacts.

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

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

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

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

Environment - As defined in the Environmental Assessment Policy and Environmental Management Act - “land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, palaeontological or social values”.

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

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

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

Evaluation – means the process of ascertaining the relative importance or significance of information, the light of people’s values, preference and judgements in order to make a decision.

Hazard - Anything that has the potential to cause damage to life, property and/or the environment. The hazard of a particular material or installation is constant; that is, it would present the same hazard wherever it was present.

Interested and Affected Party (IAP) - any person, group of persons or organisation interested in, or affected by an activity; and any organ of state that may have jurisdiction over any aspect of the activity.

Mitigate - The implementation of practical measures to reduce adverse impacts.

Proponent (Applicant) - Any person who has submitted or intends to submit an application for an authorisation, as legislated by the Environmental Management Act no. 7 of 2007, to undertake an

activity or activities identified as a listed activity or listed activities; or in any other notice published by the Minister or Ministry of Environment & Tourism.

Public - Citizens who have diverse cultural, educational, political and socio-economic characteristics. The public is not a homogeneous and unified group of people with a set of agreed common interests and aims. There is no single public. There are a number of publics, some of whom may emerge at any time during the process depending on their particular concerns and the issues involved.

Scoping Process - process of identifying: issues that will be relevant for consideration of the application; the potential environmental impacts of the proposed activity; and alternatives to the proposed activity that are feasible and reasonable.

Significant Effect/Impact - means an impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.

Stakeholder Engagement - The process of engagement between stakeholders (the proponent, authorities and IAPs) during the planning, assessment, implementation and/or management of proposals or activities. The level of stakeholder engagement varies depending on the nature of the proposal or activity as well as the level of commitment by stakeholders to the process. Stakeholder engagement can therefore be described by a spectrum or continuum of increasing levels of engagement in the decision-making process. The term is considered to be more appropriate than the term “public participation”.

Stakeholders - A sub-group of the public whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. The term therefore includes the proponent, authorities (both the lead authority and other authorities) and all interested and affected parties (IAPs). The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered stakeholders.

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

1 BACKGROUND AND INTRODUCTION

Geo Pollution Technologies (Pty) Ltd was appointed by Teuefi Trading CC (the Proponent) to undertake an environmental assessment for the proposed construction and operations of a fuel wholesale facility on Portion F of Opuwo Town and Townlands No.876, Opuwo, in the Kunene Region (Figure 1-1). The establishment will form part of the NAMCOR franchise and will supply diesel, oils and lubricants. Establishment of the fuel wholesale facility will involve:

- ◆ Site clearing, preparation and earthworks;
- ◆ Civil works required for new infrastructure;
- ◆ Construction of infrastructure for the fuel wholesale facility including spill slab and aboveground tank;
- ◆ Upgrading of associated electrical, water and sewerage utilities;
- ◆ Installation of spill control infrastructure.

Operations of the fuel wholesale facility will include:

- ◆ Filling of the storage tank with fuel from road transport tankers;
- ◆ Dispensing of fuel to customers;
- ◆ Tank dips and fuel volume reconciliation;
- ◆ General operational activities and maintenance procedures associated with the fuel wholesale facility.

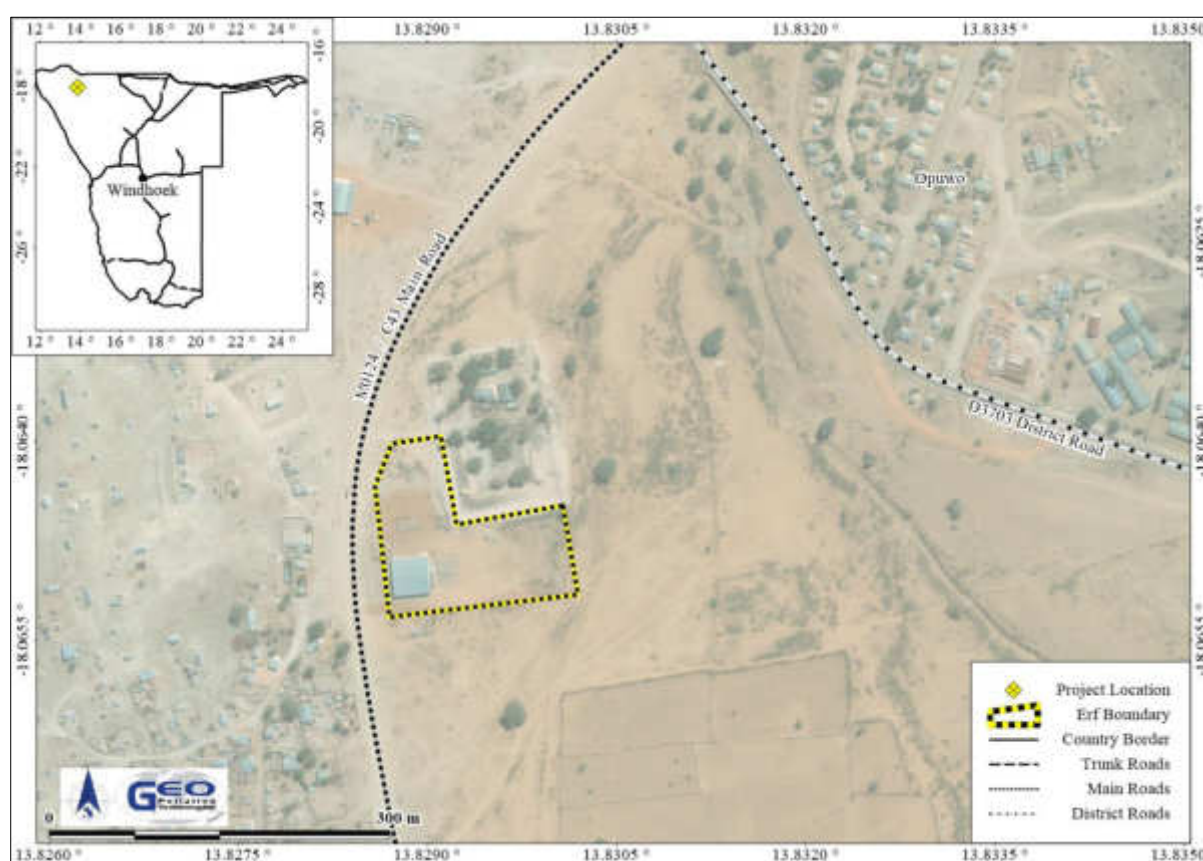


Figure 1-1. Project location

A risk assessment was undertaken to determine the potential impact of the construction, operational and possible decommissioning phases of the project on the environment. The environment being defined in the Environmental Assessment Policy and Environmental Management Act as “land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, paleontological or social values”.

The environmental assessment was conducted to apply for an environmental clearance certificate in compliance with Namibia's Environmental Management Act (Act No 7 of 2007) (EMA).

Project Justification – Bulk fuel supply, such as the proposed project, typically support construction and transport industries i.e. filling of trucks, earthmoving equipment, bowsers, etc. Currently there is no such depot in Opuwo. With Opuwo being the capital of the Kunene Region, a growth in the town population, construction and business sector is expected. Therefore a growth in bulk fuel demand is expected. In addition, the development of infrastructure through various capital projects have been initiated in the planning and construction phases. Such projects will increase the development of the area in general. Industry, construction and business industries all require fuel. The planned fuel wholesale facility will contribute towards a reliable supply in the region for the construction, business and tourism sectors in the local community.

Benefits of the fuel wholesale facility include:

- ◆ Reliable supply of fuel to the construction and business of the local communities, and businesses,
- ◆ Employment and skills training,
- ◆ Increase in economic resilience in the area through diversification of business activities and opportunities.

2 SCOPE

The aims and objectives of this environmental assessment and report are to:

1. Determine the potential environmental impacts emanating from the construction, operational and possible decommissioning activities of the fuel wholesale facility,
2. Identify a range of management actions which could mitigate the potential adverse impacts to acceptable levels,
3. Comply with the requirements of EMA,
4. Provide sufficient information to the relevant competent authority and MEFT to make an informed decision regarding the construction, operations and possible decommissioning of the facility.

3 METHODOLOGY

The following methods were used to investigate the potential impacts on the social and natural environment due to the construction and operations of the facility:

1. Baseline information about the site and its surroundings was obtained from primary information, existing secondary information as well as from a reconnaissance site visit.
2. As part of the scoping process to determine potential environmental impacts, interested and affected parties (IAPs) were consulted about their views, comments and opinions all of which are presented in this report.

4 FACILITY CONSTRUCTION, OPERATIONS AND RELATED ACTIVITIES

It is anticipated that construction of the fuel wholesale facility will commence once an environmental clearance certificate has been issued by the MEFT and the various additional permits and licences, (such as per the Ministry of Mines and Energy), have been issued by the various regulatory bodies.

4.1 PLANNED INFRASTRUCTURE

The proposed fuel wholesale facility will be situated along the C43 main road, an access route to Opuwo, which is frequented by tourists and the transport industry. Access to the site will be from the C43 Main Road. The proposed location is within the townlands of Opuwo and has been previously disturbed by anthropogenic activities. The site hosts an existing permanent structure which will form part of operations.

The facility will comprise one vented, steel, aboveground storage tank (AST) of 83 m³, spill slab and a dispenser fixed to a pump island (Figure 4-1). The pump island will be installed on a suitable spill area and the tank in an appropriate bund.. All surfaces for refuelling will be surfaced with concrete spill control slabs connected to an oil water separator with drains.

Safety systems will include emergency shutoff systems, channelling of storm water in order to prevent its contamination with hydrocarbons, and firefighting equipment. Fire extinguishers and emergency stops will be placed throughout the facility and within easy reach of attendants. Additional infrastructure on site will include an ablution facility and a staff locker room with a shower.

The proposed design of the fuel wholesale facility can be seen in Figure 4-1, minor changes may however be made during finalisation of the design. The facility will conform to the typical designs of fuel wholesale facilities in Namibia. It will adhere to all Namibian legislation and to relevant South African National Standards (SANS), ensuring safety and environmental protection.

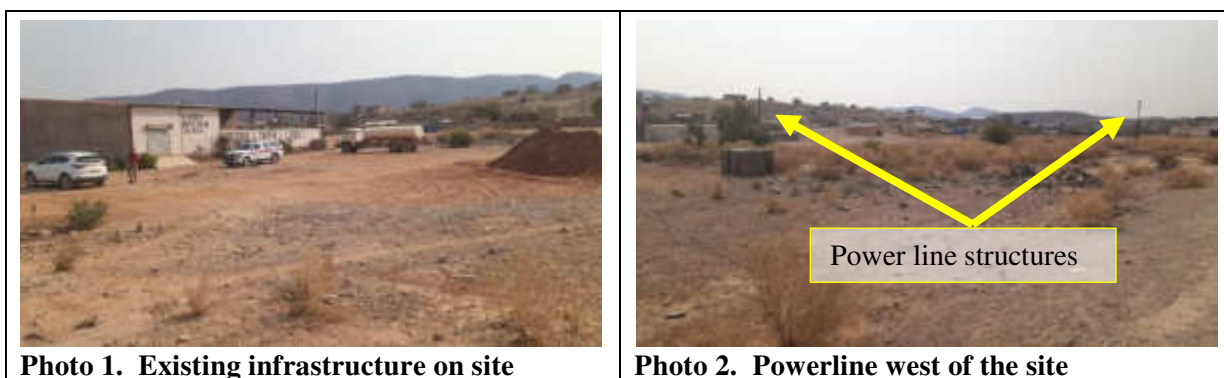


Figure 4-1. Preliminary site layout

4.2 OPERATIONAL ACTIVITIES

Diesel will be received from tanker trucks and stored in the aboveground storage tank. Fuel will be dispensed to wholesale customers via the dispenser on the pump island by pump attendants as required. Regular tank dips and reconciliation of fuel volumes will be performed to detect any possible leaks or losses. The oil water separator will be inspected regularly and cleaned when needed. Any contaminated products will be disposed of at a registered waste oil recycler or approved hazardous waste disposal facility. Any domestic waste produced will be stored in an enclosed, temporary waste storage area. From here it will be removed regularly and transported to, and disposed at, an approved municipal waste disposal facility. Some oils and lubricants will be stored on site and sold if so required by some patrons. The facility will provide employment to around five people.

5 ALTERNATIVES TO THE PROPOSED FACILITY

Since the facility must adhere to SANS standards or better no alternatives in design parameters adhering to SANS is proposed. From an environmental perspective the environmental assessment did not find any reason why the facility may not be established at this site, on condition that it complies with SANS standards or better as prescribed by Namibian legislation and gets approval from the relevant authorities on the design of the facility and its entrance / exit locations.

6 ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

To protect the environment and achieve sustainable development, all projects, plans, programmes and policies deemed to have adverse impacts on the environment require an environmental assessment, as per the Namibian legislation. The legislation and standards provided in Table 6-1 to Table 6-3 govern the environmental assessment process in Namibia and/or are relevant to the facility.

Table 6-1. Namibian law applicable to the fuel wholesale facility

Law	Key Aspects
The Namibian Constitution	<ul style="list-style-type: none"> ◆ Promote the welfare of people ◆ Incorporates a high level of environmental protection ◆ Incorporates international agreements as part of Namibian law
Environmental Management Act Act No. 7 of 2007, Government Notice No. 232 of 2007	<ul style="list-style-type: none"> ◆ Defines the environment ◆ Promote sustainable management of the environment and the use of natural resources ◆ Provide a process of assessment and control of activities with possible significant effects on the environment
Environmental Management Act Regulations Government Notice No. 28-30 of 2012	<ul style="list-style-type: none"> ◆ Commencement of the Environmental Management Act ◆ List activities that requires an environmental clearance certificate ◆ Provide Environmental Impact Assessment Regulations
Petroleum Products and Energy Act Act No. 13 of 1990, Government Notice No. 45 of 1990	<ul style="list-style-type: none"> ◆ Regulates petroleum industry ◆ Makes provision for impact assessment ◆ Petroleum Products Regulations (Government Notice No. 155 of 2000) <ul style="list-style-type: none"> ○ Prescribes South African National Standards (SANS) or equivalents for construction, operation and decommissioning of petroleum facilities (refer to Government Notice No. 21 of 2002)

Law	Key Aspects
The Water Act Act No. 54 of 1956	<ul style="list-style-type: none"> ◆ Remains in force until the new Water Resources Management Act comes into force ◆ Defines the interests of the state in protecting water resources ◆ Controls water abstraction and the disposal of effluent ◆ Numerous amendments
Water Resources Management Act Act No. 11 of 2013	<ul style="list-style-type: none"> ◆ Provide for management, protection, development, use and conservation of water resources ◆ Prevention of water pollution and assignment of liability ◆ Not in force yet
Local Authorities Act Act No. 23 of 1992, Government Notice No. 116 of 1992	<ul style="list-style-type: none"> ◆ Define the powers, duties and functions of local authority councils ◆ Regulates discharges into sewers
Public Health Act Act No. 36 of 1919	<ul style="list-style-type: none"> ◆ Provides for the protection of health of all people
Public and Environmental Health Act Act No. 1 of 2015, Government Notice No. 86 of 2015	<ul style="list-style-type: none"> ◆ Provides a framework for a structured more uniform public and environmental health system, and for incidental matters ◆ Deals with Integrated Waste Management including waste collection disposal and recycling; waste generation and storage; and sanitation.
Labour Act Act No 11 of 2007, Government Notice No. 236 of 2007	<ul style="list-style-type: none"> ◆ Provides for Labour Law and the protection and safety of employees ◆ Labour Act, 1992: Regulations relating to the health and safety of employees at work (Government Notice No. 156 of 1997)
Atmospheric Pollution Prevention Ordinance Ordinance No. 11 of 1976	<ul style="list-style-type: none"> ◆ Governs the control of noxious or offensive gases ◆ Prohibits scheduled process without a registration certificate in a controlled area ◆ Requires best practical means for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process
Hazardous Substances Ordinance Ordinance No. 14 of 1974	<ul style="list-style-type: none"> ◆ Applies to the manufacture, sale, use, disposal and dumping of hazardous substances as well as their import and export ◆ Aims to prevent hazardous substances from causing injury, ill-health or the death of human beings
Pollution Control and Waste Management Bill (draft document)	<ul style="list-style-type: none"> ◆ Not in force yet ◆ Provides for prevention and control of pollution and waste ◆ Provides for procedures to be followed for licence applications

Table 6-2. Relevant multilateral environmental agreements for Namibia and the development

Agreement	Key Aspects
Stockholm Declaration on the Human Environment, Stockholm 1972.	<ul style="list-style-type: none"> ◆ Recognizes the need for a common outlook and common principles to inspire and guide the people of the world in the preservation and enhancement of the human environment.
1985 Vienna Convention for the Protection of the Ozone Layer	<ul style="list-style-type: none"> ◆ Aims to protect human health and the environment against adverse effects from modification of the Ozone Layer are considered. ◆ Adopted to regulate levels of greenhouse gas concentration in the atmosphere.
United Nations Framework Convention on Climate Change (UNFCCC)	<ul style="list-style-type: none"> ◆ The Convention recognises that developing countries should be accorded appropriate assistance to enable them to fulfil the terms of the Convention.
Convention on Biological Diversity, Rio de Janeiro, 1992	<ul style="list-style-type: none"> ◆ Under article 14 of The Convention, EIAs must be conducted for projects that may negatively affect biological diversity.

Table 6-3. Standards or Codes of Practise

Standard or Code	Key Aspects
South African National Standards (SANS)	<ul style="list-style-type: none"> ◆ The Petroleum Products and Energy Act prescribes SANS standards for the construction, operations and demolition of petroleum facilities. ◆ SANS 10089-1 (2008) (English): The petroleum industry Part 1: Storage and distribution of petroleum products in above-ground bulk installations. <ul style="list-style-type: none"> ○ Provide requirements for spill control infrastructure

The fuel wholesale facility is listed as an activity requiring an environmental clearance certificate as per the following points from Section 9 of Government Notice No. 29 of 2012:

Hazardous Substance Treatment, Handling and Storage

- ◆ 9.1 “The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974.”
- ◆ 9.2 “Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste.”
- ◆ 9.4 “The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres at any one location.”
- ◆ 9.5 “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.”

7 ENVIRONMENTAL CHARACTERISTICS

This section lists pertinent environmental characteristics of the study area and provides a statement on the potential environmental impacts on each.

7.1 LOCALITY AND SURROUNDING LAND USE

The fuel wholesale facility is planned on Portion F of Opuwo Town and Townlands No.876, Opuwo in the Kunene Region (-18.064585°S, 13.828822°E) (Figure 1-1). Access to the site is planned from the C43 Main Road. The project location is partially developed with one permanent building structure on site. North and adjacent to the site is an abattoir while the properties east and south of the site are mainly vacant apart from a kindergarten. West of the site, across the C43, are various residential units. The site falls under the authority of the Opuwo Town Council which have indicated that the Proponent may continue with proposed operations.



Figure 7-1. Surrounding land use



Photo 3. Abattoir next to site



Photo 4. Kindergarten located south of the site

Implications and Impacts

The erf is situated in an area with mixed land use comprising mostly of a mixture of business and residential use. Being relatively low impact establishments, fuel wholesale facilities are common within mixed land use areas. Planning for the proposed project has been approved by the local town council.

7.2 CLIMATE

The project area is situated in the semi-arid Kaokoland. The climate of the area is dominated by frequent droughts, sparse seasonal rainfall and high temperatures in the summer. Rainfall in this region occurs mostly between November and March, peaking mostly January to March, whilst April to October have little or no rainfall. Rainfall has high variability in duration and intensity, resulting in variable recharge in the area. There is a high net evaporation rate, caused by high temperatures and low humidity. The month with the highest mean maximum temperature, of 35 c, is October, while the lowest monthly mean temperature, of 9 C, occurs in July See Table 7-1 for summary of climate data.

The aridity of the region causes water resources to be a scarce commodity that has to be conserved and protected from pollution. Groundwater is an important source of water in Namibia.

Table 7-1. Summary of climate data for the area (Atlas of Namibia Project, 2002)

Average annual rainfall (mm/a)	300 – 350
Variation in annual rainfall (%)	40 – 50
Average annual evaporation (mm/a)	3,000 – 3,200
Water deficit (mm/a)	1,701 – 1,900
Average annual temperatures (°C)	21 – 22

Table 7-2. Rainfall statistics (Funk et al., 2015)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Minimum (mm)	5.5	3.8	14.8	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.1	8.0
Maximum (mm)	147.2	154.9	126.4	137.5	1.2	0.1	0.0	0.0	2.6	47.3	34.9	167.4
Average (mm)	60.7	59.7	60.0	20.9	0.0	0.0	0.0	0.0	0.3	10.5	17.4	40.0
Variability (%)	58.0	61.0	49.0	109.0	624.0	442.0	436.0	0.0	207.0	81.0	48.0	81.0
Daily maximum (mm)	37.3	30.9	35.7	38.2	0.8	0.1	0.0	0.0	2.6	18.3	16.5	37.8
Average rain days	8	9	9	3	0	0	0	0	0	2	4	6
Season July - June average: 276 mm						Season coefficient of variation: 27 %						
Data range	1981-Jul-01 to 2021-Jun-30					Lat: 18.0646°S Long: 13.8288°E						

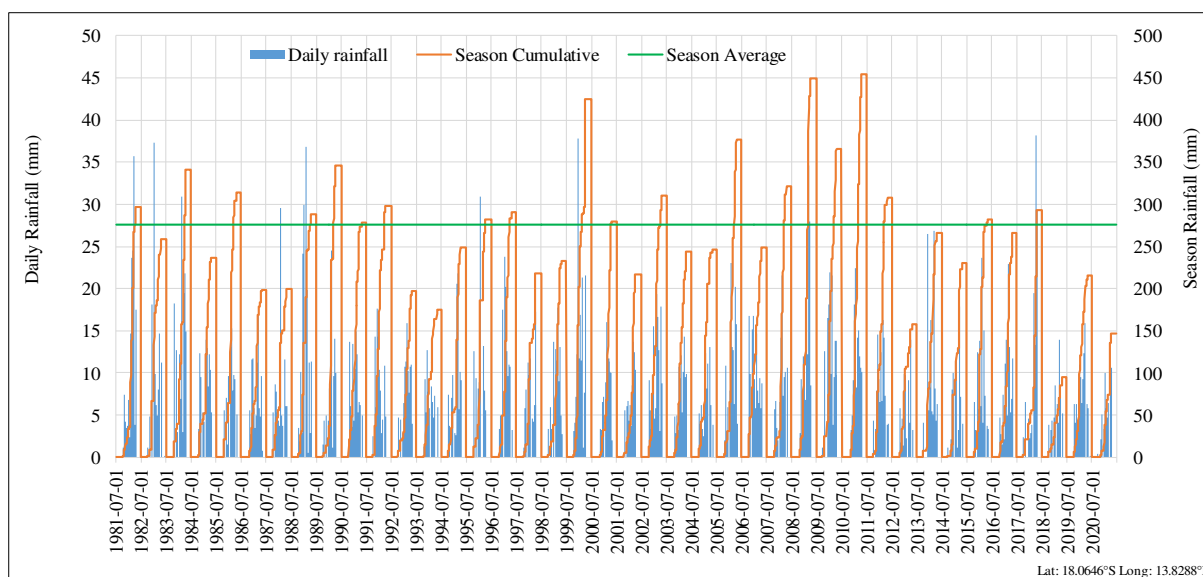


Figure 7-2. Daily and seasonal rainfall (Funk et al., 2015)

Implications and Impacts

Water is a scarce and valuable resource in Namibia and the extreme variability in seasonal rainfall makes water an extremely vulnerable resource. Rainfall events are typically thunderstorms with heavy rainfall that can occur in short periods of time (cloud bursts). The fuel wholesale facility must meet all prescribed SANS requirements and therefore should not pose any environmental threat due to Namibia's climatic conditions. Water resources would thus be safe under typical conditions and expected extremes.

7.3 TOPOGRAPHY AND DRAINAGE

The greater area is dominated by long northwest to north trending valleys with high relief and large scale geological folding. The valley floors have lower relief and drain to a north-western direction into the Namib terrain. The area west of Opuwo, near the project site, tends to have a lower relief. Operations are proposed within the sub-catchment of the Hoarusib River, an ephemeral river, which covers an approximate area of 500 km² (Interconsult Namibia, 1997). The Hoarusib River drains in a north-western direction towards the Opuwo town where it later drains more west to the Atlantic Ocean. All local rivers in the sub catchment drain in a north-western direction.

The project area itself is relatively flat. However, west of the site has a greater relief and correlating drainage is developed towards the project area. However, the C43 Main Road acts as a storm water buffer, channelling the majority of drainage from the west, away from the site. Drainage lines have develop adjacent to the site on the southern border. A map depicting surface drainage directions is indicated as Figure 7-4.



Photo 5. Drainage line south of the site



Photo 6. Drainage line with vegetation south of the site

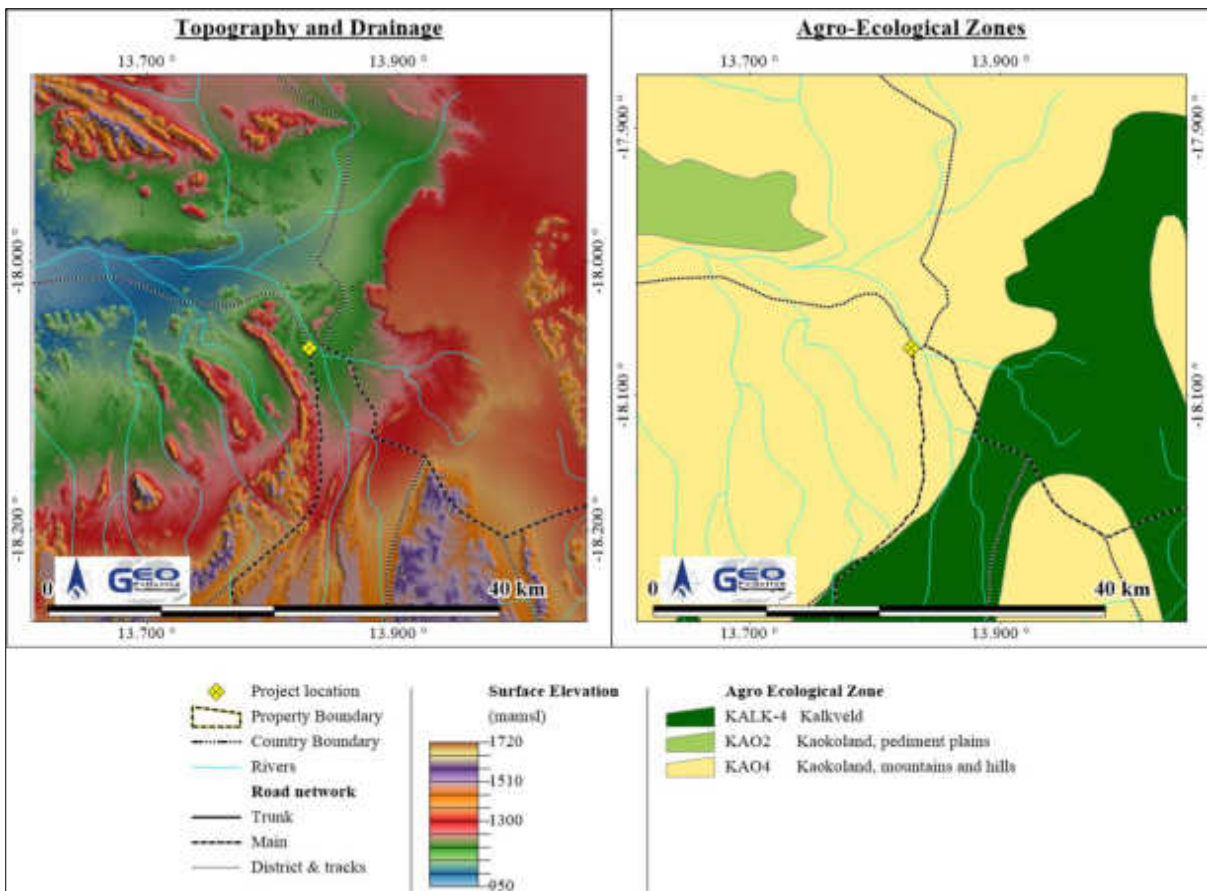


Figure 7-3. Topography, drainage and agro ecological zones



Figure 7-4. Drainage direction and slope

Implications and Impacts

There are no topographical features which may impact, or be impacted by, the proposed operations. Any pollutants that are not contained and are transported via surface water flow, will flow out of the site via storm water drainage lines and potentially pollute the natural environment. Cumulative effects may be considered for the downslope areas.

7.4 GEOLOGY AND HYDROGEOLOGY

The geology of the project area consist of rocks and deposits from the Quaternary-, Tertiary-, Permo-Carniferous- and Namibian Age (Figure 7-5). The Quaternary and Tertiary Age geology comprise of Kalahari Group deposits, which are sand, calcrete and gravel. These deposits originate mainly from fluvial deposition with some reworking through aeolian processes. The Karoo Supergroup rocks of the Permo-Carniferous overlie discordantly on Namibian-Age Damara Sequence rocks. The Karoo Supergroup consist locally of the Dwyka Formation, which typically form horizontal layering of tillite, boulder shale and sandstone. Locally the Damara Sequence consists of the Nosib Group and Otavi Group. The Abenab - and Tsumeb Sub Groups make up the Otavi Group rocks. Although a thin layer of surficial deposits may occur, rocks from the Abenab Subgroup make up the subsurface geology of the project area. This Subgroup commonly comprises of dolomite, limestone, shale and quartzite. Limestone and dolomite dominate the project area as indicated in Figure 7-6. These rocks are known to weather to Regosols and Leptosols as evident on site. Eutric Regosols are weakly developed soils which are shallow to medium. Numerous faulting-, thrusting- rifting- folding episodes have complicated the geology in the project area. A prominent geological structure, the Opuwo Lineament, occurs about 7 km north of the town and strikes towards west-northwest. The main fault orientation strikes roughly toward the northwest and to the east-northeast.

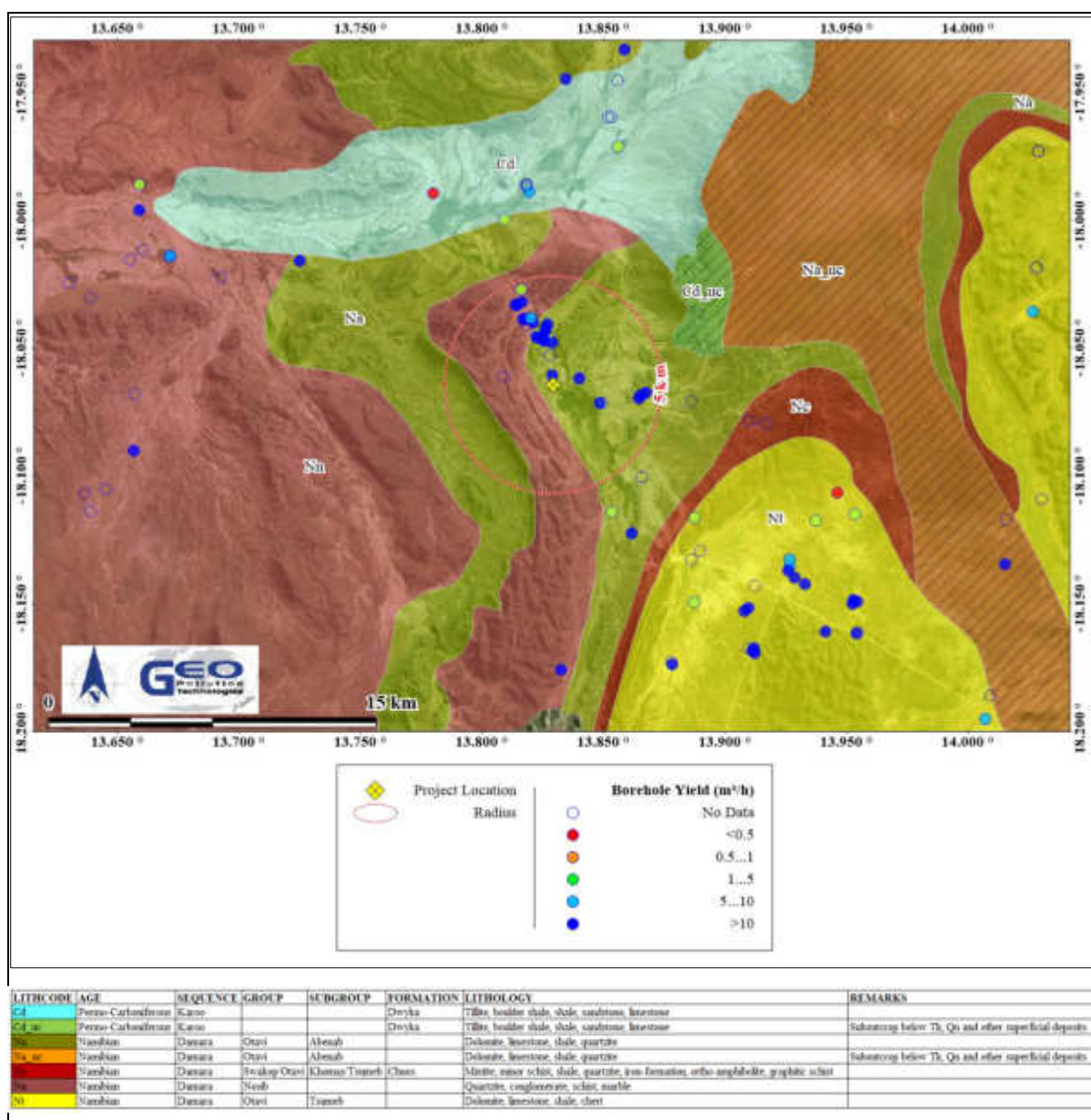


Figure 7-5. Geology of the area

According to the borehole data of the Department of Water Affairs (DWA), as seen in Table 7 2, there are at least 22 known boreholes within a 5 km radius around the study area. The average expected depth of the groundwater is 30 m below surface, but can be as shallow as 20 m below surface. The project location falls outside a water control area. All groundwater remains the property of the Government of Namibia. Groundwater flow is expected to take place through primary porosity in the surface cover, while it is expected to flow along fractures, faults, dykes/mineralised faults or along contact zones (secondary porosity) and other geological structures present within the underlying formations (hard rock formations). Karstification tends to take place within the rocks of the Otavi Group. Groundwater flow from the site can be expected in a northern to north-western direction. Local flow patterns may vary due to groundwater abstraction.

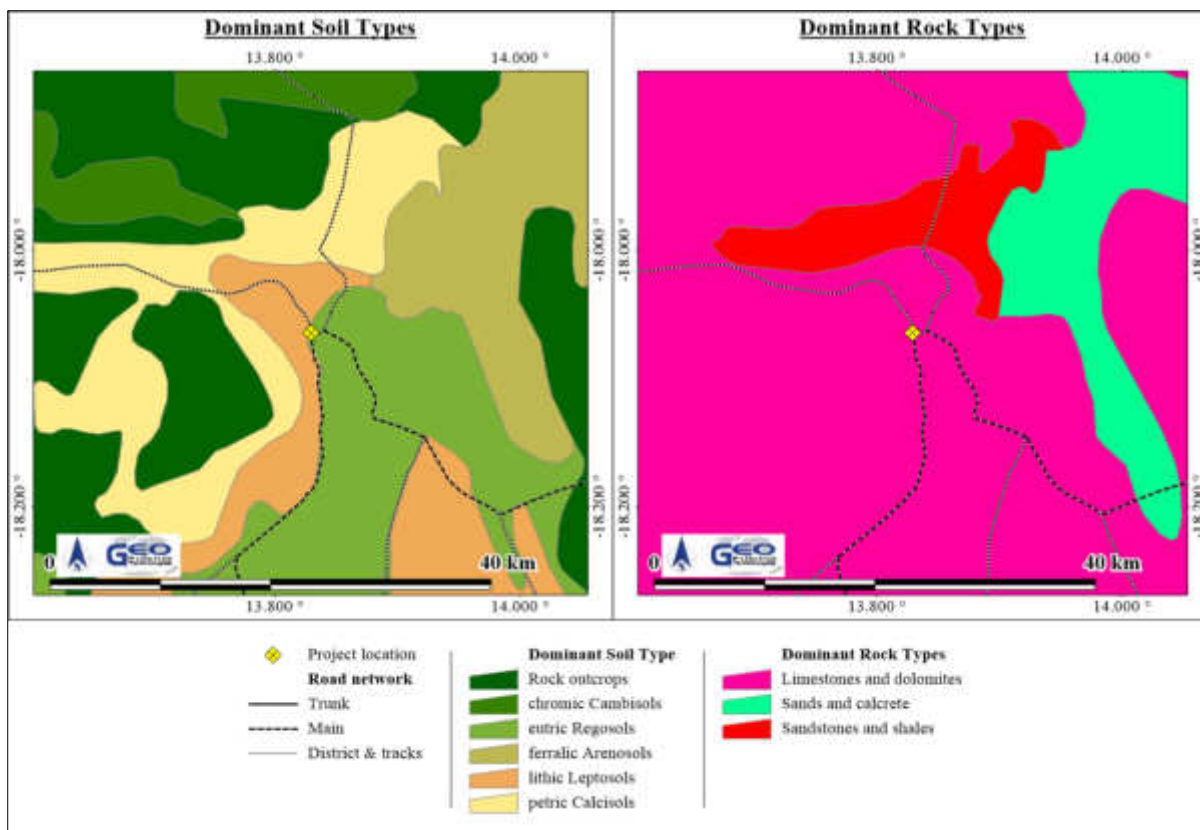


Figure 7-6. Dominant rock and soil types

Table 7-3. Groundwater borehole statistics for the area

Query Centre: Teufi Trading cc Fuel Wholesale Facility; -18.0646°S; 13.8288°E		Query Box Radius: 5.0km										
GEO		NUMBER OF KNOWN BOREHOLES	LATITUDE	LONGITUDE	DEPTH (mbs)	YIELD (m ³ /h)	WATER LEVEL (mbs)	WATER STRIKE (mbs)	TDS (ppm)	SULPHATE (ppm)	NITRATE (ppm)	FLUORIDE (ppm)
Data points		22			22	22	20	20	7	7	5	6
Minimum			-18.019604	13.781471	33	0	20	30	1090	228	1	0
Average					94	19	30	41	1530	504	2	1
Maximum			-18.109596	13.876129	150	72	40	69	2029	747	4	2
Group A					4.55%	72.73%	0.00%	0.00%	0.00%	0.00%	100.00%	83.33%
Limit					50	>10	10	10	1000	200	10	1.5
Group B					63.64%	18.18%	100.00%	80.00%	28.57%	85.71%	0.00%	16.67%
Limit					100	>5	50	50	1500	600	20	2.0
Group C					31.82%	4.55%	0.00%	20.00%	57.14%	14.29%	0.00%	0.00%
Limit					200	>0.5	100	100	2000	1200	40	3.0
Group D					0.00%	4.55%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%
Limit					>200	<0.5	>100	>100	>2000	>1200	>40	>3

Statistical grouping of parameters is for ease of interpretation, except for the grouping used for sulphate, nitrate and fluoride, which follow the Namibian guidelines for the evaluation of drinking-water quality for human consumption, with regard to chemical, physical and bacteriological quality. In this case the groupings has the following meaning:

- Group A: Water with an excellent quality,
- Group B: Water with acceptable quality
- Group C: Water with low health risk
- Group D: Water with a high health risk, or water unsuitable for human consumption.

Implications and Impacts

A risk to groundwater pollution exists due to the geological sensitivity of the area. This is mainly due to the nature of the surficial deposits and karstic geology, which is sensitive to contamination as well as the shallow groundwater. Groundwater remains an important resource and would be at risk if fuel spills are not contained, cleaned and disposed of properly.

7.5 PUBLIC WATER SUPPLY

Groundwater is the only bulk water supply to Opuwo, and is sourced from a combination of production boreholes situated in and around the town. Opuwo has a history of experiencing water supply interruptions and shortages, mainly due to groundwater quality leading to reduction in borehole yields.

Implications and Impacts

Groundwater remains an important resource and would be at risk if fuel spills are not contained, cleaned and disposed of properly. Water usage of the facility may impact on the water availability.

7.6 FAUNA AND FLORA

The site lies in the Savanna Biome with a Karstveld vegetation type. Trees such as *Acacia reficiens*, *Commiphora* species, *Euphorbia guerichiana*, *Colophospermum mopane*, *Maerua schinzii*, *Adenolobus garipensis* and a variety of other trees are characteristic of this vegetation type. Table 7-4 and Table 7-5 and present a summary of the general fauna and flora of the broader area. Two trees were retained on site during the clearing of the site for the construction of the existing building, prior to the involvement of the Proponent.

The proposed area for the fuel wholesale facility has previously been impacted by anthropogenic activities and no significant vegetation is present on site (see Photo 7 and Photo 8). Primary and invasive species dominate the site. No animals of particular significance is expected on site and mostly include birds, small mammals and arthropods. No significant impact on the fauna and flora is thus expected from the construction and future operations of the fuel wholesale facility

Table 7-4. General flora data (Atlas of Namibia Project, 2002)

Biome	Savanna
Vegetation type	Karstveld
Vegetation structure type	Woodland
Diversity of higher plants	High (Diversity rank = 4 [1 to 7 representing highest to lowest diversity])
Number of plant species	400 – 500
Percentage tree cover	2 – 10
Tree height (m)	2 – 5
Percentage shrub cover	11 – 25
Shrub height (m)	0.5 – 2
Percentage dwarf shrub cover	2 – 10
Dwarf shrub height (m)	< 0.5
Percentage grass cover	2 – 10
Grass height (m)	< 0.5
Dominant plant species	<i>Acacia reficiens</i> , <i>Commiphora</i> species, <i>Euphorbia guerichiana</i> , <i>Colophospermum mopane</i> , <i>Maerua schinzii</i> , <i>Adenolobus garipensis</i>

Table 7-5. General fauna data (Atlas of Namibia Project, 2002)

Mammal Diversity	76 - 90 Species
Rodent Diversity	24 - 27 Species
Bird Diversity	111-140 Species
Reptile Diversity	61 - 70 Species
Snake Diversity	30 - 34 Species

Lizard Diversity	32 - 35 Species
Termite Diversity	10 - 12 Genera
Scorpion Diversity	10 - 11 Species



Photo 7. Vegetation on and next to site



Photo 8. Vegetation on and next to site

Implications and Impacts

The fuel wholesale facility will lie within an already disturbed urban area. Thus no immediate threat to biodiversity in the area is expected, however, uncontrolled pollution may and can cause damage to any biodiversity surrounding the site.

7.7 DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

The project area falls within the Kunene Region with a population of 88,300 and a density of approximately 0.8 people per km². The Opuwo constituency has a population density of 10 to 25 people per km² (National Planning Commission, 2012). Table 7-6 provides demographic information for the Opuwo Constituency, the region and nationally.

Table 7-6. Demographic characteristics of Opuwo Constituency, the Kunene Region and nationally (Namibia Statistics Agency, 2011)

	Opuwo Constituency	Kunene Region	Namibia
Population (Males)	13,376	43,900	1,021,912
Population (Females)	13,896	44,400	1,091,165
Population (Total)	27,272	88,300	2,113,077
Unemployment (15+ years)	41%	19.8%	33.8%
Literacy (15+ years)	62%	64.9%	87.7%

Implications and Impacts

The facility will provide employment to people from the area. Some skills development and training also benefit employees during the operational phase.

7.8 CULTURAL, HERITAGE AND ARCHAEOLOGICAL ASPECTS

There are no known cultural, heritage or archaeologically significant sites in the immediate vicinity of the proposed fuel wholesale facility. Artefacts dating back to 12,000 BC to +1000 AD, in the form of macrolithic and microlithic stone artefacts and pottery have however previously been uncovered in the Opuwo District (Vogelsang & Keding, 2013). These artefacts point towards hunter-gatherers as well as pastoralists previously inhabiting the greater area and may be of cultural importance.

Implications and Impacts

No implications or expected impacts as the project area has been previously disturbed by anthropogenic activity. Artefacts from early settlements may be present below the surface in undisturbed areas. These may be impacted on by human activity.

8 PUBLIC CONSULTATION

Consultation with the public forms an integral component of an environmental assessment investigation and enables Interested and Affected Parties (IAPs) e.g. neighbouring landowners, local authorities, environmental groups, civic associations and communities, to comment on the potential environmental impacts associated with the proposed facility and to identify additional issues which they feel should be addressed in the environmental assessment.

Public participation notices were advertised twice in two weeks in the national papers The Namibian Sun and Republikein on 29 November and 6 December 2021 respectively. A site notice was placed on site and notification letters delivered to neighbours. The Opuwo Town Council and Kunene Regional Council was notified by hand delivery of notification letters. A background information document was loaded onto the MEFT electronic system as well as made available to commenting authorities and IAP. Roads Authority was also notified about the project.

9 MAJOR IDENTIFIED IMPACTS

During the scoping exercise a number of potential environmental impacts have been identified. The following section provides a brief description of the most important of these impacts.

9.1 HYDROCARBON POLLUTION

This section describes the most pertinent potential pollution impacts that are expected from the facility and its operations. Groundwater and soil pollution from hydrocarbon products are major issues associated with the storage and handling of such products. Both forms of pollution are prohibited in Namibia.

When a release of hydrocarbon products takes place to the soil, the Light Non-Aqueous Phase Liquids (LNAPL) will infiltrate into the soil and start to migrate vertically. LNAPL transport in the subsurface environment occurs in several phases, including bulk liquid, dissolved, and vapour phases. Mechanisms that influence transport include the physicochemical properties of the specific compounds present such as density, vapour pressure, viscosity, and hydrophobicity, as well as the physical and chemical properties of the subsurface environment, including geology and hydrogeology. Hydrocarbon liquids are typically complex mixtures composed of numerous compounds, each with its own individual physicochemical and, therefore, transport properties.

If small volumes of spilled LNAPL enter the unsaturated zone (i.e. vadose zone), the LNAPL will flow through the central portion of the unsaturated pores until residual saturation is reached. A three-phase system consisting of water, LNAPL, and air is formed within the vadose zone. Infiltrating water dissolves the components within the LNAPL (e.g., benzene, xylene, and toluene) and transports them to the water table. These dissolved contaminants form a contaminated plume radiating from the area of the residual product. Many components found in LNAPL are volatile and can partition into soil air and be transported by molecular diffusion to other parts of the aquifer. As these vapours diffuse into adjoining soil areas, they may partition back into the water phase and transfer contamination over wider areas. If the soil surface is relatively impermeable, vapours will not diffuse across the surface boundary and concentrations of contaminants in the soil atmosphere may build up to equilibrium conditions. However, if the surface is not covered with an impermeable material, vapours may diffuse into the atmosphere.

If large volumes of LNAPL are spilled, the LNAPL flows through the pore space to the top of the capillary fringe of the water table. Dissolved components of the LNAPL precede the less soluble components and may change the wetting properties of the water, causing a reduction in the residual water content and a decrease in the height of the capillary fringe.

Since LNAPL are lighter than water, it will float on top of the capillary fringe. As the head formed by the infiltrating LNAPL increases, the water table is depressed and the LNAPL accumulate in the depression. If the source of the spilled LNAPL is removed or contained, LNAPL within the vadose zone continue to flow under the force of gravity until reaching residual saturation. As the LNAPL continue to enter the water table depression, it spread laterally on top of the capillary fringe. The draining of the upper portions of the vadose zone reduces the total head at the interface between the LNAPL and the groundwater, causing the water table to rebound slightly. The rebounding water displaces only a portion of the LNAPL because the LNAPL remain at residual saturation. Groundwater passing through the area of residual saturation dissolves constituents of the residual LNAPL, forming a contaminant plume. Water infiltrating from the surface also can dissolve the residual LNAPL and add to the contaminant load of the aquifer.

Decrease in the water table level from seasonal variations may lead to dropping of the pool of LNAPL. If the water table rises again, part of the LNAPL may be pushed up, but a portion remains at residual saturation below the new water table. Variations in the water table height, therefore, can spread LNAPL over a greater thickness of the aquifer, causing larger volumes of aquifer materials to be contaminated.

Hydrocarbon products do biodegrade in the subsurface, although the effectiveness of this process depends on subsurface conditions. The type of hydrocarbon product plays a further role in the duration of biodegradation, with the longer chain components taking much longer to biodegrade.

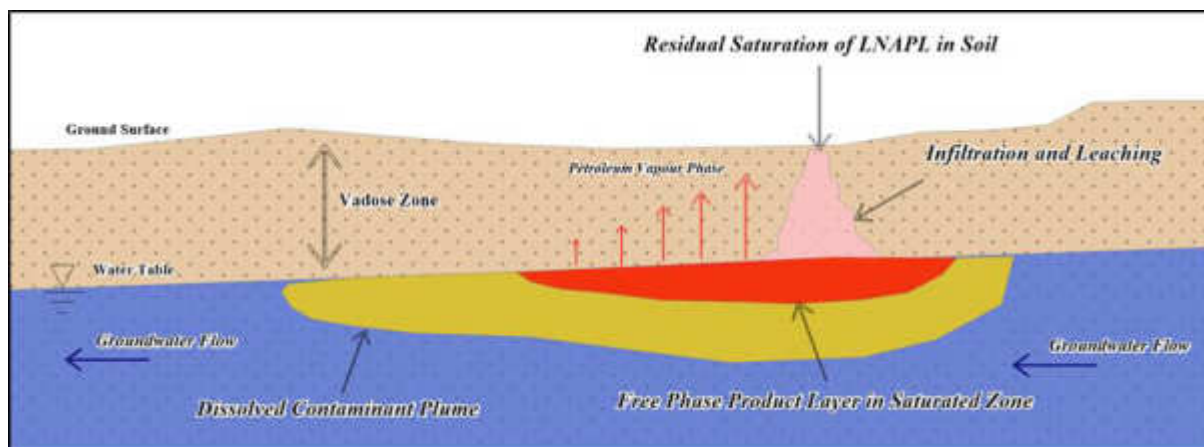


Figure 9-1. Conceptual LNAPL release to the vadose zone

9.2 NOISE IMPACTS

Noise will be a factor during the construction phase of the wholesale facility due to large trucks and machinery working on site. Some noise will also exist due to heavy and light motor vehicles accessing the site for delivering and collecting fuel during operations.

9.3 TRAFFIC IMPACTS

During construction and operations some traffic impacts can be experienced in the vicinity of the fuel wholesale facility, especially where vehicles gain access from and to the facility from the C43 Main Road. Specific consideration should be awarded to the nearby kindergarten and related school hours. Traffic signs indicating the school should be erected. Traffic flow may be impacted by delivery trucks bringing fuel to the site, potentially resulting in incidents such as collisions if proper management measures are not in place. A slight increase in the cumulative use of the existing roads may be expected, especially during the construction phase.

9.4 FIRE

Chemicals and paints used during construction may be flammable. Machinery like welders and grinders can cause sparks that can cause fires. Diesel is not flammable and thus a reduced fire risk during operations as opposed to storage of ULP. A fire risk remains if fuel and chemicals are

not handled according to Material Safety Data Sheet instructions and SANS requirements, a fire risk exist during the operational phase.

9.5 HEALTH

Construction activities and working at heights have inherent health risks. Hydrocarbons are carcinogenic and dermal contact and inhalation of fumes should be prevented.

9.6 ECOSYSTEM AND BIODIVERSITY IMPACT

As the proposed location is void of most natural vegetation, impacts will mostly be related to pollution of the environment. Pollution of the environment and groundwater, especially by fuel, can deteriorate the ecosystem structure and function.

9.7 SOCIO-ECONOMIC IMPACTS

Construction and operations of the fuel wholesale facility will provide additional employment opportunities in the region. The operational phase will create permanent employment opportunities and some training and skills development will take place. Social ills including spread of disease, alcohol misuse, theft, etc. may result from construction personnel moving into the area or due to the larger workforce if employees are not sourced locally.

10 ASSESSMENT AND MANAGEMENT OF IMPACTS

The purpose of this section is to assess and identify the most pertinent environmental impacts that may be expected from the construction, operational, and potential decommissioning activities of the facility. An EMP based on these identified impacts are also incorporated into this section.

For each impact an Environmental Classification was determined based on an adapted version of the Rapid Impact Assessment Method (Pastakia, 1998). Impacts are assessed according to the following categories: Importance of condition (A1); Magnitude of Change (A2); Permanence (B1); Reversibility (B2); and Cumulative Nature (B3) (see Table 10-1)

Ranking formulas are then calculated as follow:

$$\text{Environmental Classification} = A1 \times A2 \times (B1 + B2 + B3)$$

The environmental classification of impacts is provided in Table 10-2.

The probability ranking refers to the probability that a specific impact will happen following a risk event. These can be improbable (low likelihood); probable (distinct possibility); highly probable (most likely); and definite (impact will occur regardless of prevention measures).

Table 10-1. Assessment criteria

Criteria	Score
Importance of condition (A1) – assessed against the spatial boundaries of human interest it will affect	
Importance to national/international interest	4
Important to regional/national interest	3
Important to areas immediately outside the local condition	2
Important only to the local condition	1
No importance	0
Magnitude of change/effect (A2) – measure of scale in terms of benefit / disbenefit of an impact or condition	
Major positive benefit	3
Significant improvement in status quo	2
Improvement in status quo	1
No change in status quo	0
Negative change in status quo	-1

Significant negative disbenefit or change	-2
Major disbenefit or change	-3
Permanence (B1) – defines whether the condition is permanent or temporary	
No change/Not applicable	1
Temporary	2
Permanent	3
Reversibility (B2) – defines whether the condition can be changed and is a measure of the control over the condition	
No change/Not applicable	1
Reversible	2
Irreversible	3
Cumulative (B3) – reflects whether the effect will be a single direct impact or will include cumulative impacts over time, or synergistic effect with other conditions. It is a means of judging the sustainability of the condition – not to be confused with the permanence criterion.	
Light or No Cumulative Character/Not applicable	1
Moderate Cumulative Character	2
Strong Cumulative Character	3

Table 10-2. Environmental classification (Pastakia 1998)

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

10.1 RISK ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN

The EMP provides management options to ensure impacts of the facility are minimised. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary. The environmental management measures are provided in the tables and descriptions below. These management measures should be adhered to during the various phases of the construction and operation of the facility. This section of the report can act as a stand-alone document. All personnel taking part in the operations of the facility should be made aware of the contents in this section, so as to plan the operations accordingly and in an environmentally sound manner.

The objectives of the EMP are:

- ◆ to include all components of construction activities and operations of the facility;
- ◆ to prescribe the best practicable control methods to lessen the environmental impacts associated with the project;
- ◆ to monitor and audit the performance of operational personnel in applying such controls; and

- ◆ to ensure that appropriate environmental training is provided to responsible operational personnel.

Various potential and definite impacts will emanate from the construction, operations and decommissioning phases. The majority of these impacts can be mitigated or prevented. The impacts, risk rating of impacts as well as prevention and mitigation measures are listed below.

As depicted in the tables below, impacts related to the operational phase are expected to mostly be of medium to low significance and can mostly be mitigated to have a low significance. The extent of impacts are mostly site specific to local and are not of a permanent nature. Due to the nature of the surrounding areas, cumulative impacts are possible and include groundwater contamination and traffic impacts.

10.1.1 Planning

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

- ◆ Ensure that all necessary permits from the various ministries, local authorities and any other bodies that govern the construction activities and operations of the project are in place and remains valid. This includes the petroleum products licence.
- ◆ Ensure all appointed contractors and employees enter into an agreement which includes the EMP. Ensure that the contents of the EMP are understood by the contractors, sub-contractors, employees and all personnel present or who will be present on site.
- ◆ Make provisions to have a Health, Safety and Environmental Coordinator to implement the EMP and oversee occupational health and safety as well as general environmental related compliance at the site.
- ◆ Have the following emergency plans, equipment and personnel on site where reasonable to deal with all potential emergencies:
 - EMP / Risk management / mitigation / Emergency Response Plan and HSE Manuals
 - Adequate protection and indemnity insurance cover for incidents;
 - Comply with the provisions of all relevant safety standards;
 - Procedures, equipment and materials required for emergencies.
- ◆ If one has not already been established, establish and maintain a fund for future ecological restoration of the project site should project activities cease and the site is decommissioned and environmental restoration or pollution remediation is required.
- ◆ Establish and / or maintain a bi-annual reporting system to report on aspects of construction activities, operations and decommissioning as outlined in the EMP.
- ◆ Submit bi-annual reports to the MEFT to allow for environmental clearance certificate renewal after three years. This is a requirement by MEFT.
- ◆ Appoint a specialist environmental consultant to update the environmental assessment and EMP and apply for renewal of the environmental clearance certificate prior to expiry.

10.1.2 Skills, Technology and Development

During the construction and operations of the facility, training will be provided to a portion of the workforce to be able to construct and operate various features of a fuel wholesale facility according to the required standards. Skills will be transferred to an unskilled workforce for general tasks. The technology required for the development of the facility may be new to the regional industry, aiding in operational efficiency. Development of people and technology are key to economic development.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Employment, technological development and transfer of skills	2	1	2	3	1	12	2	Probable
Daily Operations	Employment, technological development and transfer of skills	2	1	2	3	2	14	2	Definite
Indirect Impacts	Transfer of skills and technological development	2	1	2	3	3	16	2	Definite

Desired Outcome: To see an increase in skills of local Namibians, as well as development and technology advancements in the fuel wholesale industry.

Actions

Prevention:

- If the skills exist locally, contractors must first be sourced from the town, region, and then nationally. Deviations from this practice must be justified.
- Skills development and improvement programs to be made available as identified during performance assessments.
- Employees to be informed about parameters and requirements for references upon employment.
- The Proponent must employ local Namibians where possible. Deviations from this practise should be justified appropriately.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Record should be kept of training provided.
- Ensure that all training is certified or managerial reference provided (proof provided to the employees) inclusive of training attendance, completion and implementation.
- Bi-annual summary reports on all training conducted.

10.1.3 Revenue Generation and Employment

Construction of the facility is hinged on employment. Skilled and unskilled labour will be employed for the installation of the tank and associated infrastructure as well as general earth works. Unskilled labour may be sourced locally while it is expected that skilled contractors within Namibia will be used for specialised work. The construction phase will therefore contribute to employment creation in the unskilled labour sector while contributing to sustaining employment of the skilled sector during the construction phase.

In addition, Opuwo being the capital of the Kunene Region, a growth in the town population and further development of the town is also expected. The facility will thus ensure a reliable supply of fuel to fuel outlets which supply the business and growing tourism industry. The change in land use will lead to changes in the way revenue is generated and paid to the national treasury. An increase in skilled and professional labour will take place due to the operations of the facility.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Employment and contribution to local and national economy	2	1	2	2	2	12	2	Definite
Daily Operations	Employment contribution to local economy	2	1	3	3	1	14	2	Definite
Indirect Impacts	Decrease in unemployment, contribution to local economy	3	1	3	3	3	27	3	Definite

Desired Outcome: Contribution to national treasury and provision of employment to local Namibians. Create a competitive environment to enhance service delivery to the area.

Actions

Prevention:

- The Proponent should employ local Namibians where possible.
- If the skills exist locally, employees must first be sourced from the town, then the region and then nationally.
- Deviations from this practice must be justified.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Bi-annual summary report based on employee records.

10.1.4 Demographic Profile and Community Health

The project is reliant on labour during the construction and operational phase. The scale of the project is limited and it is not foreseen that it will create a change in the demographic profile of the local community. Community health may be exposed to factors such as communicable disease like HIV/AIDS as well as alcoholism/drug abuse, associated with possible foreign construction teams and/or clients collecting fuel. An increase in foreign people in the area may potentially increase the risk of criminal and socially/culturally deviant behaviour. However, such trends are considered unlikely. Spills and leaks may present risks to members of the public. The project may further contribute to cumulative demand for services for the region which includes electricity and water supply.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	In-migration and social ills related to unemployment	2	-1	1	1	2	-8	-1	Probable
Daily Operations	In-migration and social ills related to unemployment	2	-1	1	2	2	-10	-2	Probable
Indirect Impacts	The spread of disease	2	-1	2	2	2	-12	-2	Probable

Desired Outcome: To prevent the in-migration and growth in informal settlements and to prevent the spread of diseases such as HIV/AIDS.

Actions:

Prevention:

- Employ only local people from the area, deviations from this practice should be justified appropriately.
- Facility design to incorporate water and energy saving technologies such as low energy electrical appliances and lighting.
- Educational programmes for employees on HIV/AIDs and general upliftment of employees' social status.
- Appointment of reputable contractors.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Facility inspection sheet for all areas which may present environmental health risks, kept on file.
- Bi-annual summary report based on educational programmes and training conducted.
- Bi-annual report and review of employee demographics.

10.1.5 Fuel Supply

The construction and operation of the facility will aid in securing fuel supply to the various industries and business in the town and region.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Daily Operations	Contribution to economy, contribution to the fuel supply in the area	2	1	3	2	2	14	2	Definite
Indirect Impacts	Secure supply in fuel allowing travel and trade	3	1	3	2	2	21	3	Definite

Desired Outcome: Ensure a secure fuel supply remains available to the area.

Actions

Prevention:

- Ensure compliance to the petroleum regulations of Namibia.
- Proper management to ensure constant supply.
- Record supply problems and take corrective actions.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Record supply problems and corrective actions taken and compile a bi-annual summary report.

10.1.6 Traffic

The facility may increase the traffic flow to the site through the provision of construction material (construction phase) and fuel (operational phase). This may increase the risk of incidents and accidents.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Delivery of equipment and building supplies	1	-1	2	2	2	-6	-1	Probable
Daily Operations	Increase traffic, road wear and tear and accidents	1	-1	2	2	2	-6	-1	Probable

Desired Outcome: Minimum impact on traffic and no transport or traffic related incidents.

Actions

Prevention:

- Erect clear signage regarding access and exit points at the facility.
- Erect clear signage related to the presence of the Kindergarten to all vehicles exiting the site. Discussion should be held with the RA to enquire whether there may be any recommendations for implementation.
- Tanker trucks delivering fuel should not be allowed to obstruct any traffic.
- If any traffic impacts are expected, traffic management should be performed to prevent these.
- The placement of signs to warn and direct traffic will mitigate traffic impacts.
- Consultation and approval from the town council regarding designs and access to the facility from the main road are required.
- The Proponent needs to continue engaging with the Roads Authority and acquire the required permissions prior to the facility being erected.
- All proposed construction and operations activities should adhere to the road reserve requirements of the district road.
- Tanker trucks delivering fuel should not be allowed to obstruct any traffic.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Any complaints received regarding traffic issues should be recorded together with action taken to prevent impacts from repeating itself.
- A bi-annual report should be compiled of all incidents reported, complaints received, and action taken.

10.1.7 Health, Safety and Security

Every activity that will be associated with the construction and operational phase is reliant on human labour and therefore will expose them to health and safety risks. Activities such as the operation of machinery and handling of hazardous chemicals (inhalation and carcinogenic effect of some petroleum products), will pose the main risks to employees. Security risks will be related to unauthorized entry, theft and sabotage.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Physical injuries, exposure to chemicals and criminal activities	1	-2	3	3	1	-14	-2	Probable
Daily Operations	Physical injuries, exposure to chemicals and criminal activities	1	-2	3	3	2	-16	-2	Probable

Desired Outcome: To prevent injury, health impacts and theft.

Actions

Prevention:

- Clearly label dangerous and restricted areas as well as dangerous equipment and products.
- Equipment that will be locked away on site must be placed in a way that does not encourage criminal activities (e.g. theft).
- Provide all employees with required and adequate personal protective equipment (PPE).
- Ensure that all personnel receive adequate training on operation of equipment / handling of hazardous substances.
- All health and safety standards specified in the Labour Act should be complied with.
- Implementation of maintenance register for all equipment and fuel/hazardous substance storage areas.
- Selected personnel should be trained in first aid and a first aid kit must be available on site. The contact details of all emergency services must be readily available.
- Implement and maintain an integrated health and safety management system, to act as a monitoring and mitigating tool, which includes: colour coding of pipes, operational, safe work and medical procedures, permits to work, emergency response plans, housekeeping rules, MSDS and signage requirements (PPE, flammable etc.).
- Security procedures and proper security measures must be in place to protect workers and clients, especially during cash in transit activities.
- Reduce the amount of cash kept on site to reduce the risk of robberies.
- Strict security that prevents unauthorised entry during construction phases.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any incidents must be recorded with action taken to prevent future occurrences.
- A bi-annual report should be compiled of all incidents reported. The report should contain dates when training were conducted and when safety equipment and structures were inspected and maintained.

10.1.8 Fire

Construction and operational activities may increase the risk of the occurrence of fires. Fuel, is flammable and therefore presents a fire and explosion risk.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Fire and explosion risk	2	-2	2	2	1	-20	-3	Probable
Daily Operations	Fire and explosion risk	2	-2	2	2	1	-20	-3	Probable

Desired Outcome: To prevent property damage, veld fires, possible injury and impacts caused by uncontrolled fires.

Actions:

Prevention:

- Ensure all chemicals are stored according to MSDS and SANS instructions.
- Maintain regular site, mechanical and electrical inspections and maintenance.
- Clean all spills / leaks.
- Special note must be taken of the regulations stipulated in sections 47 and 48 of the Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990).
- Follow SANS standards for operation and maintenance of the facility.
- All dispensers must be equipped with devices that cut fuel supply during fires.
- A holistic fire protection and prevention plan is needed. This plan must include an emergency response plan, firefighting plan and spill recovery plan.
- Maintain firefighting equipment and promote good housekeeping.
- Personnel training (firefighting, fire prevention and responsible housekeeping practices).

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A register of all incidents must be maintained on a daily basis. This should include measures taken to ensure that such incidents do not repeat themselves.
- A bi-annual report should be compiled of all incidents reported. The report should contain dates when fire drills were conducted and when fire equipment was tested and training given.

10.1.9 Air Quality

During construction, earth works and general construction may increase ambient dust levels. Diesel is not highly volatile and during the operational phase will release only limited fuel vapours into the air during refuelling of bulk storage tanks as well as at filling points. Prolonged exposure may have carcinogenic effects.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Excessive dust generated from maintenance and upgrade activities	1	-1	2	2	2	-6	-1	Probable
Daily Operations	Fuel vapours	1	-1	2	2	1	-5	-1	Probable

Desired Outcome: To prevent health impacts and minimise the dust generated.

Actions

Prevention:

- Personnel issued with appropriate masks where excessive dust or vapours are present.
- A complaints register should be kept for any dust related issues and mitigation steps taken to address complaints where necessary e.g. dust suppression.
- Employees should be coached on the dangers of fuel vapours.
- Vent pipes must be properly placed as per SANS requirements.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any complaints received regarding dust or fuel vapours should be recorded with notes on action taken.
- All information and reporting to be included in a bi-annual report.

10.1.10 Noise

Noise pollution may be generated due to heavy and light motor vehicles accessing the site to offload construction material, fuel or refuel. Construction activities are noisy by nature. The fuel wholesale facility will only operate during normal business hours which means that vehicle noise is generated throughout the day. Fuel delivery and collection will mainly be by fuel tanker trucks. Such vehicles have the potential to create noise disturbances when starting or slowing down.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Excessive noise generated from construction activities – nuisance and hearing loss	1	-2	2	2	1	-10	-2	Probable
Daily Operations	Noise generated from the operational activities – nuisance	1	-1	2	2	1	-5	-1	Probable

Desired Outcome: To prevent any nuisance and hearing loss due to noise generated.

Actions

Prevention:

- Follow World Health Organization (WHO) guidelines on maximum noise levels (Guidelines for Community Noise, 1999) to prevent hearing impairment.
- All machinery must be regularly serviced to ensure minimal noise production.
- Keep volume of public address systems on a level where neighbours are not impacted on.
- Manage noise caused by clients – loud music etc.
- Hearing protectors as standard PPE for workers in situations with elevated noise levels, truck drivers should not be allowed to start or rev their engines during night time periods between 10:00 and 05:00 to ensure that noise parameters of 40 dB (for residential areas during the night) are not transgressed (Guidelines for Community Noise, 1999).

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- WHO Guidelines.
- Maintain a complaints register.
- Bi-annual report on complaints and actions taken to address complaints and prevent future occurrences.

10.1.11 Waste production

Various waste streams will be produced during the construction and operational phase. Waste may include hazardous waste associated with the handling of hydrocarbon products etc. Construction waste may include building rubble and discarded equipment contaminated by hydrocarbon products. Contaminated soil and water is considered as a hazardous waste. Domestic waste will be generated by the facility and related operations. Waste presents a contamination risk and when not removed regularly may become a fire hazard.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Excessive waste production, littering, illegal dumping, contaminated materials	1	-2	2	2	2	-12	-2	Definite
Daily Operations	Excessive waste production, littering, contaminated materials	1	-2	2	2	2	-12	-2	Definite

Desired Outcome: To reduce the amount of waste produced, and prevent pollution and littering.

Actions

Prevention:

- Waste reduction measures should be implemented and all waste that can be re-used / recycled must be kept separate.
- Ensure adequate disposal storage facilities are available.
- Ensure waste cannot be blown away by wind.
- Prevent scavenging (human and non-human) of stored waste.
- Waste should be disposed of regularly and at appropriately classified disposal facilities, this includes hazardous material (empty chemical containers, contaminated rugs, paper water and soil).
- The spill catchment traps and oil water separator should be cleaned regularly and waste disposed of appropriately. Surfactants (soap) may not be allowed to enter the oil water separator.
- See the material safety data sheets available from suppliers for disposal of contaminated products and empty containers.
- Liaise with the municipality regarding waste and handling of hazardous waste.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A register of hazardous waste disposal should be kept. This should include type of waste, volume as well as disposal method/facility.
- Any complaints received regarding waste should be recorded with notes on action taken.
- The oil water separator must be regularly inspected and all hydrocarbons removed once detected. Outflow water must comply with effluent quality standards as per town council requirements.
- All information and reporting to be included in a bi-annual report.

10.1.12 Ecosystem and Biodiversity Impact

The site is mostly void of naturally occurring vegetation due to previous and current human activities on and around the site. Some vegetation may however require removal. Construction and operations may present a pollution risk to the surrounding environment and biophysical features.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Impact on fauna and flora. Loss of biodiversity	1	-1	3	2	2	-7	-1	Definite
Daily Operations	Impact on fauna and flora. Loss of biodiversity	1	-1	2	2	2	-6	-1	Improbable

Desired Outcome: To avoid pollution of, and impacts on, the ecological environment.

Actions.

Prevention:

- Educate all contracted and permanent employees on the value of biodiversity.
- Report any extraordinary animal sightings to the Ministry of Environment, Forestry and Tourism.
- Mitigation measures related to waste handling and the prevention of groundwater, surface water and soil contamination should limit ecosystem and biodiversity impacts.
- Avoid scavenging of waste by fauna.
- The establishment of habitats and nesting sites at the facility should be avoided where possible.

Responsible Body:

- Contractor
- Proponent

Data Sources and Monitoring:

- All information and reporting to be included in a bi-annual report.

10.1.13 Groundwater, Surface Water and Soil Contamination

During construction, heavy machinery may present a contamination risk to the soil, surface and groundwater through breakdowns. Operations will entail the storage and handling of various hydrocarbons (such as fuels and lubricants) which present a contamination risk. Such material may contaminate surface water, soil and groundwater. Contamination may either result from failing storage facilities, or spills and leaks associated with fuel handling. The facility will provide fuel to public vehicles which may further present contamination risks through overfills, spills and leakages. Modern wholesale facilities are well designed to reduce leakages and spillages from contaminating soil and water.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Contamination from hazardous material spillages and hydrocarbon leakages	2	-1	2	2	1	-10	-2	Probable
Daily Operations	Contamination from hazardous material spillages and hydrocarbon leakages	2	-2	2	2	1	-20	-3	Probable

Desired Outcome: To prevent the contamination of water and soil.

Actions

Prevention:

- All construction machines should be maintained to be in a good working condition during operations.
- Employ drip trays and spill kits during construction when onsite servicing / repairs of equipment is needed.
- Spill control structures and procedures must be in place according to SANS standards or better and connection of all surfaces where fuel is handled, with an oil water separator.
- All fuelling should be conducted on surfaces provided for this purpose. E.g. Concrete slabs with regularly maintained seals between slabs.
- The procedures followed to prevent environmental damage during service and maintenance, and compliance with these procedures, must be audited and corrections made where necessary.
- Proper training of operators must be conducted on a regular basis (fuel handling, spill detection, spill control).

Mitigation:

- Any spillage of more than 200 litre must be reported to the Ministry of Mines and Energy.
- Spill clean-up means must be readily available on site as per the relevant MSDS and spills cleaned up immediately.
- The spill catchment traps and oil water separator should be cleaned regularly and waste disposed of at a suitably classified hazardous waste disposal facility.
- Surfactants (soap) may not be allowed to enter the oil water separator e.g. no soap usage on spill control surfaces.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A report should be compiled bi-annually of all spills or leakages reported. The report should contain the following information: date and duration of spill, product spilled, volume of spill, remedial action taken, comparison of pre-exposure baseline data (previous pollution conditions survey results) with post remediation data (e.g. soil/groundwater hydrocarbon concentrations) and a copy of documentation in which spill was reported to Ministry of Mines and Energy.

10.1.14 Visual Impact

This is an impact that not only affects the aesthetic appearance, but also the integrity of the facility. Bright lights used at night may impact on nearby residents.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Aesthetic appearance and integrity of the site	1	-1	2	2	2	-6	-1	Probable
Daily Operations	Aesthetic appearance and integrity of the site	1	-1	2	2	2	-6	-1	Probable

Desired Outcome: To minimise aesthetic impacts associated with the facility and prevent lighting from being a visual disturbance.

Actions

Prevention:

- Regular waste disposal, good housekeeping and routine maintenance on infrastructure will ensure that the longevity of structures are maximised and a low visual impact is maintained.
- Lights should be directed downwards and away from residents where possible.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A bi-annual report should be compiled of all complaints received and actions taken.

10.1.15 Impacts on Utilities and Infrastructure

Impacts related to utilities and infrastructure are more likely during the construction phase when excavations are conducted on site. During the operational phase such damage mainly relate to the road surface and access, spill or an explosion, which is very unlikely. In addition, there are limited utilities in the vicinity of the erf. Any damage caused to existing infrastructure and services supply like roads and power line may result in a break in service delivery.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction Phase	Disruption of services and damage to infrastructure	2	-1	2	2	1	-10	-2	Probable
Daily Operations	Disruption of services and damage to infrastructure	2	-1	2	2	1	-10	-2	Improbable

Desired Outcome: No impact on utilities and infrastructure.

Actions

Prevention:

- Appointing qualified and reputable contractors is essential.
- The contractor must determine exactly where amenities and pipelines are situated before construction commences (utility clearance e.g. ground penetrating radar surveys).
- Liaison with the suppliers of services is essential.

Mitigation:

- Emergency procedures for corrective action available on file.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A bi-annual report should be compiled of all incidents that occurred and corrective action taken.

10.1.16 Cumulative Impact

Possible cumulative impacts associated with the construction and operational phase include increased traffic, dust and noise in the area.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	The build-up of minor impacts to become more significant	2	-1	2	2	1	-10	-2	Improbable
Daily Operations	The build-up of minor impacts to become more significant	2	-1	2	2	1	-10	-2	Improbable

Desired Outcome: To minimise all cumulative impacts associated with the facility.

Actions

Mitigation:

- Addressing each of the individual impacts as discussed and recommended in the EMP would reduce the cumulative impact.
- Reviewing biannual and annual reports for any new or re-occurring impacts or problems would aid in identifying cumulative impacts and help in planning if the existing mitigations are insufficient

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Reviewing bi-annual summary reports based on all other impacts will give an overall assessment of the cumulative impacts of the construction and operational phases.

10.2 DECOMMISSIONING AND REHABILITATION

Decommissioning is not foreseen during the validity of the environmental clearance certificate. Decommissioning was however assessed as construction activities include modification and decommissioning. Should decommissioning occur at any stage, rehabilitation of the area may be required. Decommissioning will entail the complete removal of all infrastructure including buildings and underground infrastructure. Any pollution present on the site must be remediated. The impacts associated with this phase include noise and waste production as structures are dismantled. Noise must be kept within WHO standards and waste should be contained and disposed of at an appropriately classified and approved waste facility and not dumped in the surrounding areas. Future land use after decommissioning should be assessed prior to decommissioning and rehabilitation initiated if the land would not be used for future purposes. The EMP for the facility will have to be reviewed at the time of decommissioning to cater for changes made to the site and to implement guidelines and mitigation measures.

10.3 ENVIRONMENTAL MANAGEMENT SYSTEM

The Proponent could implement an Environmental Management System (EMS) for their operations. An EMS is an internationally recognized and certified management system that will ensure ongoing incorporation of environmental constraints. At the heart of an EMS is the concept of continual improvement of environmental performance with resulting increases in operational efficiency, financial savings and reduction in environmental, health and safety risks. An effective EMS would need to include the following elements:

- ◆ A stated environmental policy which sets the desired level of environmental performance;
- ◆ An environmental legal register;
- ◆ An institutional structure which sets out the responsibility, authority, lines of communication and resources needed to implement the EMS;
- ◆ Identification of environmental, safety and health training needs;
- ◆ An environmental program(s) stipulating environmental objectives and targets to be met, and work instructions and controls to be applied in order to achieve compliance with the environmental policy; and
- ◆ Periodic (internal and external) audits and reviews of environmental performance and the effectiveness of the EMS.
- ◆ The EMP.

11 CONCLUSION

The fuel wholesale facility will have a positive impact on the business and construction sector operational in the vicinity and the town as a whole, see Table 11-1. In addition to reliable and convenient fuel supply, the fuel wholesale facility will contribute locally to skills transfer and training which in turn develops the local workforce during operations of the facility.

Negative impacts can successfully be mitigated. SANS standards relating to the petroleum industry and prescribed by Namibian law must be followed during all operations of the fuel wholesale facility. Noise pollution should at all times meet the prescribed WHO requirements to prevent hearing loss and not to cause a nuisance. Fire prevention should be adequate, and health and safety regulations should be adhered to in accordance with the regulations pertaining to relevant laws and internationally accepted standards of operation. Any waste produced must be removed from site and disposed of at an appropriate facility or re-used or recycled where possible. Hazardous waste must be disposed of at an approved hazardous waste disposal site.

The environmental management plan (Section 10) should be used as an on-site reference document for the operations of the facility. Parties responsible for transgressing of the EMP should be held responsible for any rehabilitation that may need to be undertaken. The Proponent could use an in-house Health, Safety, Security and EMS in conjunction with the EMP. All operational personnel must be taught the contents of these documents.

Should the Directorate of Environmental Affairs (DEA) of the MEFT find that the impacts and related mitigation measures, which have been proposed in this report, are acceptable, an environmental clearance certificate may be granted to the Proponent. The environmental clearance certificate issued, based on this document, will render it a legally binding document which should be adhered to. Focus could be placed on Section 10, which includes an EMP for this project. It should be noted that the assessment process's aim is not to stop the proposed activity, or any of its components, but to rather determine its impact and guide sustainable and responsible development as per the spirit of the EMA.

Table 11-1. Impact summary class values

Impact Category	Impact Type	Construction		Operations	
<i>Positive Rating Scale: Maximum Value</i>		5		5	
<i>Negative Rating Scale: Maximum Value</i>			-5		-5
EO	Skills, Technology and Development	2		2	
EO	Revenue Generation and Employment	2		2	
SC	Demographic Profile and Community Health		-1		-2
EO	Fuel Supply			2	
SC	Traffic		-1		-1
SC	Health, Safety and Security		-2		-2
PC	Fire		-3		-3
PC	Air Quality		-1		-1
PC	Noise		-2		-1
PC	Waste Production		-2		-2
BE	Ecosystem and Biodiversity Impact		-1		-1
PC	Groundwater, Surface Water and Soil Contamination		-2		-3
EO	Impacts on Utilities and Infrastructure		-2		-2
SC	Visual Impact		-1		-1
	Cumulative Impact		-2		-2

BE = Biological/Ecological EO = Economical/Operational PC = Physical/Chemical SC = Sociological/Cultural

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Appendix A: Proof of Public Consultation

Notified IAPs

Name	Surname	Organisation
Ngauane	Tjiningure	Private
Mave	Kuatewane	Private
Ugrimba	Tjiningure	Private
Uatjakuare	Tjiningure	Private
Franssisco	Kamutali	Private
Johannes	Simon	Private
Elise	Kataraya	Mondel Kinder Garden
Herman	Redelinghuis	Abattoir
The Executive Director		Ministry of Agriculture, Water and Land Reform
Ino	Namwoonde	Planning Division: Kunene Regional Council
George P.	Kamseb	Chief Regional Officer: : Kunene Regional Council
Chief Executive Officer		Opuwo Town Council
Jackie	Rutz	Chief Engineering Technician - Maintenance - Opuwo Region: Roads Authority



Public Participation Notification: Environmental Assessment Teuefi Trading Fuel Depot in Opuwo, Kunene Region

Name & Surname	Organisation/Address	Tel / Mobile	Email	Signature
Ngawane Jwingire	Katutura		Privacy Block	<i>[Signature]</i>
Nasekuakomane	Katutura			<i>[Signature]</i>
Uorimba Jwingire	Katutura			<i>[Signature]</i>
Majikane Jwingire	Katutura			<i>[Signature]</i>
FRANCISOKAMALI	Katutura			mail.com
JOHANNES SIMON	Katutura			com
ELISE KATIRAYU	MONDEL			teuefi.com
HARON BRANDEKKE	KATUTURA			<i>[Signature]</i>

November 2021

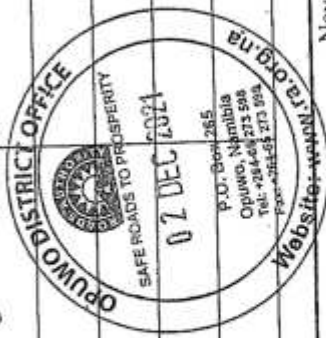
Geo Pollution Technologies
Teuefi Trading Fuel Depot in Opuwo, Kunene Region



Public Participation Notification: Environmental Assessment Teuefi Trading Fuel Depot in Opuwo, Kunene Region

Name & Surname	Organisation/Address	Tel / Mobile	Email	Signature
Ngawane Juingure	Katukura			
Navekuatemane	Katukura			
Urimba Juingure	Katukura			
Uyake Juingure	Katukura			
FRANCOIS Kamuti	Katukura			imailo.com
JOHANNES Siny	Katukura			com
ELISE KATAGU	MONDEL			Katagaga
Herman Katsikanyo	SABABE KATUKURA			

Privacy Block



November 2021

Geo Pollution Technologies
Teuefi Trading Fuel Depot in Opuwo, Kunene Region

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info@opuwotc.org.na

OPUWO TOWN COUNCIL

OFFICE OF THE CHIEF EXECUTIVE OFFICER

22 November 2021

**Health Inspector
 Ministry of Health and Social Services
 Kunene Region**

Dear Sir/Madam

SUBJECT: CONSENT TO ACQUIRE A FITNESS CERTIFICATE

The above subject herein refers.


This consent serves to certify/confirm that the following business should be granted permission to acquire a fitness certificate on the following business area,

Name of the business	Location	Nature of Business
Tuefi Trading CC	Township – Country Hotel	Wholesale & Distribution of Fuel

To this end, your good office is hereby requested to carry an inspection to establish if the business is fit to be registered as per the Health Act. Please do not hesitate to contact the above enquiries should you need further clarity.

Thank you,

Yours Sincerely,


Petrus Shuuya
 CHIEF EXECUTIVE OFFICER

All Official Correspondences must be addressed to the Chief Executive Officer

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Maandag 29 November 2021

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NUUS 5

Nuwe riglyne vir C19-verwante sindroom onder kinders

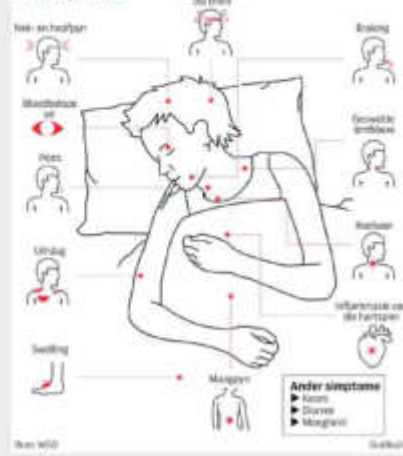
Hennette Lamprecht

Die Wêreldgesondheidsorganisasie (WHO) het opgedateerde riglyne bekend gemaak vir die behandeling van kinders met inflammatoriese multistelselsindroom (PIMS-TS) wat met Covid-19 geassosieer word. PIMS-TS is 'n raar maar ernstige toestand waartydens kinders met Covid-19 inflammasie ontwikkel wat verskillende organe in die liggaam aantast. Kinders met die toestand verhoes gespesialiseerde sorg en kan in die intensiewaarsorgseenheid opgeneem word. Hoewel dit 'n ernstige toestand is, sê die WHO kan kinders met die regte mediese sorg herstel. Volgens die organisasie se opgedateerde riglyne word die gebruik van kortikosteroïde vir kinders van 0 tot 18 jaar voorgestel wat met die toestand in die hospitaal opgeneem

word. Dit is bykomend tot ondersteunende behandeling en sorg. Die riglyne volg ná drie waarnemingsstudies wat fokus op data van 885 pasiënte. Die WHO het die toestand die eerste keer in Mei verlede jaar beskryf en 'n voorlopige kliniese definisie daarvoor gegê. Die organisasie sê hoewel kinders 'n lae risiko het om ernstige of kritiese Covid-19 te ontwikkel, maak sekere onderliggende toestande - net soos in die geval van volwasse - hulle meer vatbaar vir ernstige siekte. Die mees algemene van die toestande is vetsug, chroniese longsiekte (insluitend asma), hartaesiekte en die onderdrukking van immuniteit. Die sindroom en kindersiekte versorsaak erge koors, ontsteking en hartkomplikasies en is in Suid-Afrika as 'n aanmeldbare mediese toestand (NMC) verklaar. NMC is siekte wat van openbare

belang is, want dit hou beduidende gesondheidsrisiko's in wat tot uitbrekings of epidemies plaaslik en internasionaal kan lei. Netwerk24 het vroeër berig die siekte se simptome stem ooreen met dié van Kawasaki se sindroom in kinders jonger as vyf jaar. Volgens die Amerikaanse sentrum vir siektebeheer- en -voorkoming (CDC) is Kawasaki se sindroom 'n koorsiekte waarvan die simptome 'n veluitslag, gewone hande, voete en limfkliere in die nek, rooi oë en irritasie en ontsteking in die keel en mond en van die lippe insluit. Intussen het prof. Clarissa Pieper, pediater en neonatoloog, gesê daar is vanaf Januarie tot Julie vanjaar ses kinders in Namibia dood wie se sterfte met Covid-19 geassosieer word. Vier was volgens haar "neurologies abnormaal" en van twee is daar geen data beskikbaar nie. "Daar is nie regtig 'n databasis vir dit nie, so die antwoord is 'ons weet nie'. Ons weet net dat die 'kiddies' nie (van Covid 19) doodgaan nie," het sy by nerrag gesê.

Pediatriese inflammatoriese multistelselsindroom (PIMS-TS) se simptome



Nghiwete-skadu hang nog oor NSFAP

Fonds betaal steeds sy eerste hoof

are se verlore finansiële inligting lê daikry die ministerie van ioer onderwys wat ie tegemoetkomend is nie.

Augusta Gag

Die nalatenskap van die eerste uitvarende oof van die Finansiële Hulpfonds vir Namibiese studente (NSFAP) kniel-alter steeds pogings om oekhouding by die instansie reg te kry. Die fonds stel jaarlikse emiddels N\$1,5 miljard ir nasionale studies aan amibiese studente beskikbaar.

Die NSFAP betaal nog lke maand me. Hilya ighiwete se salaris, ten pyle van 'n skending van vertroue in haar vermoen verslag te doen oor itgawes. Dit het daardie eie dat die raad haar eskors bet.

Die huidige waarnemen- uitvoerende hoof van ie NSFAP mnr. Kennedy andume, het Donderdag aam met die vervoorsa- r van die NSFAP-raad en oorsitter van die fonds se ulit- en risikokomitee, mnr. Stephen Tjisoero, in- ringende vrae voor die arlementêre- staande amitee oor openbare ekeninge probeer ant- oord.

Kandume het verskeie ere vermy in die periode anaf 2010 tot 2013 waar- oor daar geen finansiële

rekords of goedgekeurde verslag gevind kan word nie, en dit voorgoed as kernsde boekum beskik- bare antwoorde nie vol- doende is nie.

Mnr. Duda Mururoa, die kumliteersovisiter, het be- klemdoon Nghiwete was destyds as ondersekretar- is verantwoordelik vir die fonds onder die minist- erie van hoer onderwys. Toe die fonds onafhank- lik geword het, was sy dus verantwoordelik vir finansiële hoekhouding, "voor, gedurig en ná, die sorging uit die ministerie."

"Ek het doelbewus genoem dat sy toe onder- sekretaris in die minist- erie was, en dienselfde persoon was wat uitvoer- ende hoof geword het. As rekenpligtige beampte was sy verantwoordelik vir alle uitbetalings."

"Sy was veronderstel om daardie dokumente in hoo- en saam met die dokum- ente na die fonds oor te skuil," het Mururoa gesê.

Hy het gesê die komitee het 'n brief van Nghiwete ontvang, waarin sy sê sy kan nie voor die komitee verskyn nie. Die rede is NSFAP se appél teen die arbeidskommissaris se bevinding dat sy heraan- gestel moes word, en vorige salarisse aan haar betaal moet word.

Kandume moes oor die NSFAP se pogings uitbrei om dokumente van 'n dekade gelede op te spoor. Nghiwete het glo in 2014 'n brief aan die ministerie se permanente sekretaris gestuur waarin die ver-

miste dokumente aange- vra is. Geen reaksie is ontvang nie.

"Daar was ook opvolg- en persoonlike besoeke, maar sonder enige posit- iewe reaksie. Die inlig- ting oor uitbetalings aan studente mees ons herwin uit baieke fêres en bank- state," sê hy.

Die ministerie het glo meer as 100 000 lêers met die NSFAP se data- integrasieprojek in 2019 deurgestaan en die



Me. Hilya Ngiwete 083 4652

met die NSFAP se data- integrasieprojek in 2019 deurgestaan en die

inligting opgeteken. Dit is later gebruik om uiteinde- lik vir die fonds 'n lenings- boek op te stel.

Op die adfunds-oudituar- gemaak, mnr. Goms Manette, so vraag "Sal ons aanneem die dokumente is vernietig?" het hy ge- antwoord: "Ons weet nie." Volgens Kandume is die dokumente "waarskynlik

lewers in die ministerie waar dit stof opgaan."

Hy sê egter: "Ons mag bliu of groen word, maar ons mag nooit daardie rekords vind nie."

"Transaksies van latere jare is in orde, maar daardie vroeë jare spook nog met ons. Ons sal die ministerie nader en 'n manier vind om dit af te

sluit en 'n oplossing vind waar ons oor te begin," het hy gesê.

Vrae wat aan Nghiwete die huidige minister vi hoer onderwys, dr. It Kandji-Murungi en d ministerie se ampteli woordvoerder gestuur was teen draktyd nogo beantwoord.

augetta@republiekain.com

PUBLIC PARTICIPATION NOTICE ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF A FUEL DEPOT IN OPTUWO

Geo Pollution Technologies (Pty) Ltd was appointed by Teufel Trading CC to undertake an environmental assessment for the construction and operation of a fuel depot on Portion F of Optuwo Town and Townships No.876, Optuwo, in the Karoo Region.

<http://www.thenamibia.com/projects/projects.html>

The environmental assessment will be according to the Environmental Management Act of 2007 and its regulations as published in 2012.

Teufel Trading CC plans to construct and operate a fuel wholesale facility on the said site. General operations will involve the receipt of diesel from road tankers, dispensing fuel to customers on a self-serve area from an above-ground storage tank and day-to-day administrative tasks.

All Interested and Affected Parties are invited to register with the environmental consultant. By registering you are provided with the opportunity to share any concerns, issues or concerns related to the facility, for consideration in the environmental assessment. Additional information can be requested from Geo Pollution Technologies.

All comments and concerns should be submitted to Geo Pollution Technologies by **14 December 2021**.

Project Name: Geo Pollution Technologies
Telephone: +264 61 257411
Fax: +264 61 257411
E-Mail: TeufelTrading@thenamib.com

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Voortrekkers trap vir renosters

Karli Radajep

Die Voortrekkers vier vanjaar hul 90ste bestaanjaar met die tema "Voortrekkers gaan groot". Die Namibiese Voortrekkers het laasens besluit om hul eie span vir die Nubank Desert Dash-afswedwed in te skryf ten bate van Namibië se renosters.

Die Voortrekkers is onder meer 'n nstansie om letterskap en 'n dienssaarheid onder die jeug te kweek, inwel as 'n liefde vir die natuur en die wil om dit te beskerm.

"Aangesien daar vanjaar weens die 'covid-regulasies' nie 'n groot openbare viering vir die 90ste verjaardag kan wees nie, het ons dit goedgedink om ons eie span vir die Dash in te skryf wat ongeveer 500 Voortrek-

ker-lede in hulle harte sal saamdra." Die ryers is Lizevke Hepkama, Heather Turner, Ruben Smith en Edrich Gerber. Hulle gaan die 393 km tussen Windhoek al die pad tot by Swakopmund in onder 24 uur aanskop. Die vier ryers trap nie net fiets vir lekkerre nie - hulle ry vir die renosterbewaringsprojek wat aan die begin van die jaar van stapel gestuur is.

Die Verkenners (graad 9- tot 12-leerlinge) was bevoorreg om vanjaar op 'n renosterbewaringskamp te gaan en te besef watter groot uitdaging dit is om net één renoster te ontfang. Dit kos ongeveer N\$21 000 per renoster.

Die horing word versprei om te keer dat die renoster gestroop word. Enige nodige inentings word dan sommer ook gedoen, terwyl die renoster onder narkose is. Die proses moet elke drie jaar herhaal word, omdat die horing so vinnig groei.

Die Voortrekkers het vir hulself

'n doelwit van N\$50 000 gestel om vir hierdie belangrike projek in te stel.

Om bykomende geld in te saamel, word unieke fietsrybemde teen N\$600 elk verkoop. Uiteindelik sal 20% van die wins aan die renosterbewaringsprojek geskenk word. Die res van die geld sal aangewend word om Voortrekker-kampe vir alle lede meer bekostigbaar te maak.

"Om moet die publiek uit om saam met ons die hende te dra en groot te gaan vir die renoster!"

Belangstellendes kan 'n skenking aan die Voortrekkers vir die bewaringsprojek of hul jeugfonds maak. Bank Windhoek
Kudu (482172)
6728153801
Verwysing - 90/90
Kontak Elaine McCarthy by elminemccarthy@gmail.com of +264 81 237 0050 vir bestellings. Kindergrasies is ook volgens ouderdomme beskikbaar.



Die burgemeester van Tsumeb, mnr. Mathews Hangula, en dr. Anna Muller, di direkteur van die Namibia Housing Action Group, ná die ondertekening van die ooreenkoms. FOTO VERBOD

Bekostigbare behuising vir inwoners

Tsumeb, SDFN en NHAG werk saam

Die vennootskap sal verblyfreg, basiese dienste en ordentlike skooling vir lae-inkomste-inwoners in die dorp help verseker.

Enzo Ananie op Tsumeb

'n Memorandum van verstandhouding (MoU) is onlangs tussen die Tsumeb-munisipaliteit, die Shack Dwellers Federation of Namibia (SDFN) en die Namibia Housing Action Group (NHAG) onderteken.

Die ooreenkoms is aangegaan om meer laekostebehuising vir Samestaan-luise agter Agra te bou en die informele nedersetting Kuvikiland op te gradeer.

Die SDFN is 'n netwerk van reddings-groepe vir informele nedersettings, gehuurde kamers, plakkershuise en hanelow mense wat aan die Shack Dwellers International-netwerk gekoppel is, terwyl die Namibia Housing Action Group 'n nuwingsgewende organisasie is wat as 'n trust gestig is om die SDFN te ondersteun.

Volgens Tsumeb-se burgemeester, mnr. Mathews Hangula, het die ooreenkoms hulle toe om as vennote saam te werk om verblyfreg, basiese dienste en ordentlike skooling vir lae-inkomste-inwoners op Tsumeb te help verseker.

Hangula het gesê die munisipaliteit verbind hom tot 'n konstruktiewe en gesamentlike vennootskap vir bestaande en deurlopende projekte, en ook om meer grondleweringsprojekte aan te pak, terwyl seker gemaak word die gemeenskap is deel van elke ontwikkelingsproses en verstaan elke stap.

"Die hoofdoelwit van ons vennootskap is om mense op voetsolvlak toe te laat

om 'n plaaslike owerheid te ontwikkel en om 'n omvattende en volhoubare proses te implementeer om gemeenskaps gedrewe grond- en aksion ontwikkelingsproesse te verbeter," het hy gesê.

"Deur hierdie metode sal ons vir lae inkomste-inwoners bekostigbare verblyfsekeriteit, toegang tot basiese dienste en ordentlike skooling kan go deur die SDFN se spaarfonds," se hy.

Hangula het gesê nog 'n doelwit is om 'n leeromgewing te skep terwyl hierdie strategie vir Tsumeb geïmplementeer word om deel te vorm van die inklusiewe stedelike ontwikkelingsproses.

"As munisipale raad het ons reed begin, maar ons moet voortnu besees met meer gemeenskapsgedrewe grond en behuisinginisiatiewe gebaseer op di tipe vennootskappe," het hy gesê.

Die NHAG se direkteur, mnr. Ann Muller, het gesê die ooreenkoms moes 'n verandering in mense se lewens bring en nie net 'n papier wees wat in die laas van die munisipaliteit en NHAG sit opgaan nie.

"Die SDFN-lede het meer as 200 huis gebou, meer grond is onlangs toegeken en meer as 2 300 huise in Kuvikiland word tans voorberei vir opgradering. Die ooreenkoms baan die weg vir ver snelling na 'n inkrementele ontwikkel ling wat alle inwoners en lae-inkomste gesinne sal help om verblyfreg, dienste en ordentlike skooling te verseker," se sy.

Me. Juliana Somes, 'n lid van di SDFN, se die lede wag al baie jare vir die dokument om onderteken te woen en daarom moet die ooreenkoms hulle help om saam te werk om al die lae inkomtegemeenskappe op Tsumeb t bereik.

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Kinders leer op 'n prettige manier

Tanja Basse

Die Namibian Dolphin Project (NDP) bied vanjaar weer die geleentheid aan kinders om die oonderdomme van ses en 15 om om klimaatsverandering,

seediere en die oseaan te leer. Chelsea Kovacsik, die veldopleidingsbeampte van die NDP, se kinders kan onder meer van waiwisse en dolfyne leer, hoekom ribbe in rommel verstrengel raak, hoe

dolfyne met mekaar kommunikeer en hoekom waiwisse gestrand raak. "Die program is nie net vir kinders wat dalk een dag mariene biologie wil word nie, maar ook vir kinders wat in oseane en seediere belangstel."

"Hulle neem ook aan prettige aktiwiteits deel terwyl hulle iets leer," het sy gesê.

"Die NDP se gekwalifiseerde span van mariene biologie is gereed om hul kennis te deel en jou kind se vrae te beantwoord."

Die program word in die oggendes vanaf 10:00 tot 11:00 en in die namiddae vanaf 14:00 tot 15:00 op 7,

9, 11, 14, 16, 18, 21 en 24 Desember aangebied.

"Die kinders sal in oonderdommingsgroepe van ses tot 11 en 12 tot 15 ingedeel word om 'n gruter ervaring vir hulle te bied."

Belangstellendes wat hul kinders wil inskryf, kan by nam.dolphin.edu@gmail.com of op WhatsApp by 081 687 6461 registreer.

"Dit kos N\$50 en ouers moet asseblief aanduid hoe oud hul kinders is en of hulle die oggend- of middagessie verkies. Hulle is welkom om ons te kontak as hulle nog enige vrae het."

tanja@republiekein.com



Sabrina Sykes, Charlotte Soler, Chelsea Kovacsik en Giorgia Karente is gereed om kinders by die sentrum in Walvisbaai te ontvang. FOTO JACK HARRY

PUBLIC PARTICIPATION NOTICE ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF A FUEL DEPOT IN OPIVVO

Geo Pollution Technologies (Pty) Ltd was appointed by Tuuli Trading CC to undertake an environmental assessment for the construction and operation of a fuel depot on Portion F of Opiwivo Town and Townlands No.876, Opiwivo, in the Karas Region.

<http://www.donamb.com/projects/projects.html>

The environmental assessment will be according to the Environmental Management Act of 2007 and its regulations as published in 2012.

Tuuli Trading CC plans to construct and operate a fuel retail/wholesale facility on the said site. General operations will involve the receipt of diesel from road tankers, dispensing fuel to customers on a self-serve basis and an above-ground storage tank and day to day administrative tasks.

All interested and Affected Parties are invited to register with the environmental consultant. By registering you are provided with the opportunity to share any comments, issues or concerns related to the facility, for consideration in the environmental assessment. Additional information can be requested from Geo Pollution Technologies.

All comments and concerns should be submitted to Geo Pollution Technologies by **24 December 2021**.

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4 | MONDAY 6 DECEMBER 2021
NEWS

Sun

• SYNDICATE CLAIMS ANOTHER VICTIM

Charcoal Rot: Industry cheated out of millions

The mastermind behind the syndicate is allegedly running operations from a prison cell, and recently defrauded a company of N\$20 000.

REPUBLICAIN STAFF REPORTER
WINDHOEK

The newest victim of a syndicate that allegedly disappeared with the deposit money of South African buyers for Namibian charcoal and briquettes, forged forestry permits and defrauded the industry of millions is a well-known charcoal factory.

Namchar, a company based in Cape Town which manufactures and packs Namibian charcoal and briquettes, was scammed out of N\$20 000 in November.

The company is just one of a long list of victims who say they've been cheated out of their money lately.

The alleged mastermind behind the syndicate is a certain Silvester Haodom of Outjo, who also allegedly does business under the pseudonyms Lazarus, General Haodom and Victor.

He apparently has several co-conspirators, which include charcoal buyers in South Africa.

Haodom reportedly has up to 27 cases of fraud against him, with several people telling *Namibian Sun's* sister publication, *Republikein*, that he even tried to scam them from a jail cell. Apart from the fact that the syndicate apparently issues or falsifies permits, it operates under various names and uses several bank accounts.

Namchar

Namchar's Lara Basson said in the latest incident, a certain Victor Shilongo from Outjo contacted her to say he had a load of coal. However, when the coal was meant to be loaded on Tuesday, the farm owner demanded a deposit and refused to let the truck leave.

Namchar had by then already paid N\$20 000 to Shilongo, on whose name the permit was issued, but it never reached the rightful farm owner.

The farmer received a forged deposit slip from Shilongo, according to which Namchar allegedly paid N\$57



BIG BOSS: The alleged mastermind behind a charcoal syndicate, Silvester Haodom. PHOTOS CONTRIBUTED

000 into his account - an amount the company would never pay as a deposit.

Basson said the load of charcoal has now been unloaded at Otjiwarongo and the police have informed her that the lorry driver's passport has been confiscated, while officers are apparently investigating Haodom, "who is running the syndicate from prison".

Despite several attempts by *Republikein* to contact Haodom through calls, emails, text messages and WhatsApp messages, he could not be located.

Five cases

Marlise de Jager, a broker from Tsumeb who has been supplying Namibian charcoal to South African buyers since 2013, said she has been scammed out of a little less than N\$250 000 over the past year, and has already opened five cases against Haodom and his co-conspirators.

The syndicate defrauded her of N\$58 000, N\$14 000, N\$120 000, N\$36 000 and then N\$60 000 in five separate transactions, and she said she received threats when she told Haodom she was going to report him to the police.

She said the syndicate often plays the role of middleman, taking the buyer's deposit, while the Namibian farmer never sees a cent.

"When they scam South Africans, they send photos of the truck that has apparently been loaded and make sure they do not show the registration mark. Then they [the buyers] pay the deposit and the syndicate disappears with the money."

De Jager produced a wealth of evidence that included forged forestry permits as well as months of correspondence with Haodom and the alleged syndicate members.

He even tried to do business with her from prison, she said. While *Republikein* could not reach him on Tuesday and Wednesday, he contacted De Jager on the same day with the same cellphone number to say he was upset that she had spoken to the media about him.

He also previously informed her from prison that he would repay her. He said while he won't admit that he stole the money, he is "only human".

De Jager said Haodom approaches farmers under different pseudonyms because everyone has already been warned against him.

She also showed photos of harvesting and export permits for charcoal that had been forged by the syndicate - with farmers' names removed and a certain Lazarus' name and details entered.

In recent times, permit fraud has often led to producers' farms being closed down when the agriculture ministry's directorate of forestry discovered that permits had been tampered with.

De Jager claimed that the syndicate has a permit book in its possession, which also apparently bears real stamps from the directorate's various offices across the country. She discovered this after she started inquiring about the authenticity of the permits at various forestry offices.

Caught

Maans Steenkamp, a buyer and exporter of charcoal from Outjo, said the syndicate also scammed him out of a total of N\$60 000.

He said Haodom works as a middleman and pretends to be the owner of the charcoal loads.

"He works under a lot of



SO-CALLED PROOF: This picture was sent to Namchar as proof that charcoal was being loaded at Outjo.

names. We pay the deposit for the coal, but the farmer never receives the money. The farmer then does not want to let the truck go and Haodom disappears with the money."

In one such case, Steenkamp bought a load of coal from Tsumeb and paid a N\$20 000 deposit for it.

"When the farmer did not want to let the truck leave, I told him 'I paid you your deposit' and sent him the slip. He then said the bank account the money was paid into didn't belong to him."

Steenkamp and this farmer worked with the police to apprehend Haodom.

They finally managed to arrest him in Outjo's informal settlement.

Steenkamp said Haodom goaded him and said they should throw him in jail, "because nothing ever happens to him there". He was recently released on N\$10 000 bail.

"That man has already stolen millions from the charcoal industry. He is like a ghost; he disappears and is released on bail every time."

"As soon as he receives the money, he e-wallets it to three or four different numbers," Steenkamp said.

More victims

Charcoal producer Jan Vermeulen of Aranos is another of the syndicate's victims.

He was scammed out of a load of wood on 10 April, for which he was not paid. He refused to let the truck leave with his cargo until he received the deposit and withheld permits.

The truck left without the permits anyway, and Vermeulen opened a case with the police. Haodom was subsequently arrested.

The criminal mastermind owes Vermeulen N\$40 000, and has apparently undertaken to repay him.

Vermeulen also contacted the South African buyer involved, who said he paid the deposit to Haodom.

Transporter Enole Krief of Mariental has been defrauded

of N\$24 000 by a South African buyer who allegedly previously worked with Haodom. He unloaded cargo in the vicinity of Johannesburg and, despite many promises, has not yet received his money.

He said Haodom and another person involved in the transaction were allegedly paid, but only he did not receive his money.

Leaked

In a leaked telephone conversation with a certain Lazarus in which an official tries to arrange a meeting with him, he can be heard saying: "You cannot stop me, this is bigger than all of us".

Lazarus then claimed he has information about illegal charcoal loads that have left the country, but cannot meet the official in Gobabis "because his time costs money".

The official offered to meet with him, and while he initially agreed to a time and place, he asked that no members of law enforcement should show up, only forestry officials.

He would then apparently provide them with evidence on how massive the charcoal scam is. "I believe you have honest people in your offices. Do not try to save the country from me, save it from the South Africans," Lazarus said.

He, however, then changed his mind about the meeting again and said he would first send the damning evidence to them. "This will never end. You can make me retire, but Charcoal Rot will never stop; that's good money!"

He added that the government is getting the shortest end of the stick when it comes to charcoal exports, while farmers apparently earn between N\$70 000 and N\$80 000 per truck.

"This is where I come in, to share the wealth with the people of the land, where it belongs," Lazarus said.

Government's security systems are weak, he claimed, adding that someone will always be smarter than the system.

PUBLIC PARTICIPATION NOTICE ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF A FUEL DEPOT IN OJUWO

Geo Pollution Technologies (Pty) Ltd was appointed by **Tuefi Trading CC** to undertake an environmental assessment for the construction and operation of a fuel depot on Portion F of Ojowo Town and Townlands No. 175, Ojowo, in the Karas Region.

<http://www.thetuefi.com/projects/projects.html>

The environmental assessment will be according to the Environmental Management Act of 2007 and its regulations as published in 2012.

Tuefi Trading CC plans to construct and operate a fuel wholesale facility on the said site. General operations will involve the receipt of diesel from road tankers, dispensing fuel to customers on a self-serve basis from an aboveground storage tank and day to day administrative tasks.

All Interested and Affected Parties are invited to register with the environmental consultant. By registering you are provided with the opportunity to share any comments, issues or concerns related to the facility, for consideration in the environmental assessment. Additional information can be requested from Geo Pollution Technologies.

All comments and concerns should be submitted to Geo Pollution Technologies by **14 December 2021**.

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Amupanda rallies city residents against crime

ESTER KAMATI
WINDHOEK

In a speech read on his behalf by deputy mayor Clementia Hanzes, outgoing Windhoek mayor Job Amupanda on Thursday stated that crime prevention and road safety are the responsibility of all Windhoek residents and not just the officers.

"In order to prevent crime, we need a much more comprehensive strategy, a strategy that would allow all stakeholders to play a significant role in enhancing community safety," he said. Amupanda implored residents to become more involved in policing "by ensuring that they claim ownership of their neighbourhood and create a safer environment

for all." He added that policing has evolved to fit the needs of the community, specifically acknowledging the City Police for incorporating technology in their operations. "The service has innovative information and communication technology systems developed for the benefit of the city and its residents," he said, adding that this helps in management of crime and traffic accidents.

"We have confidence in the City Police and will continue to give them all the necessary support needed to carry out their noble and essential national duty." According to him, the implementation of the City Police Service has made a significant contribution in reducing crime. Amupanda encouraged the City Police chief to award officers with medals

for their hard work to motivate them. "Those men and women put their lives on the line every day to make sure that we are safe and our properties are protected."

Acting CEO of the City of Windhoek Jennifer Comalie urged residents to cooperate with the officers in the execution of their duties.

Respect

City Police chief Abraham Kanime reminded officers that the public expects a lot from them, and urged them to maintain professionalism and to show respect to each person while maintaining discipline and police ethics. Kanime, who has been heading the service since its inception, described the team as innovative and creative. "This is dem-



15 YEARS STRONG City Police Service Day, commemorated on 10 November, was celebrated last week in celebration of 15 years of City Police service. PHOTOFILE

onstrated by the introduction of community policing programmes, use of technology in both crime prevention and road safety, the adoption of various operational support techniques and concepts."

The chief commended the members of the City Police for implementing victim support services and the use of technology in crime

prevention and road safety through CCTV, mobile automated speed cameras, automated number plate recognition systems, and a speed reference and measuring system.

"Therefore, I would like to encourage you to keep improving on those and develop new strategies to complement the smart city concept."

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■ DRAFTING 'AT ADVANCED STAGE'

Minister mum on Rent Control Bill

It is not yet known when the Rent Control Bill will be tabled in Parliament.

JENA USHENA
WINDHOEK

In the absence of a rent control law, Namibians continue to pay high rent while the ministry of urban and rural development remains mum on when a bill will be tabled. If enacted, the Rent Control Bill will provide for the implementation of a Rent Control Board in accordance with the Rent Control Ordinance of 1997.



RENT CONTROL, Minister of urban and rural development Erastus Uutoni. PHOTO: ARIANA

In September 2021, urban and rural development minister Erastus Uutoni told this agency that the bill was with the attorney-general's office for scrutiny and finalisation before it is tabled in Parliament.

However, Attorney-General Festus Mbandaka in a recent interview with *Nampos* disputed Uutoni's claims, saying his office had advised the government on the bill as far back as 2016 when the office was occupied by former attorney-general Sackey Shungula and Albert Kawana.

"The office of the attorney-general, while under the leadership of my two predecessors, provided legal advice on the Rent Control Bill to the ministry of industrialisation and trade and, subsequently, the ministry

of rural and urban development.

"Also, our last correspondence consultation with the rural and urban ministry on the matter took place in August 2021 in which the AG advised (inter alia) the status of the legal advice on the bill and the process and structures to be followed by the ministry going forward to which the bill should be presented," he said. The Harambee Prosperity Plan (HPP) Quarter 1 report handed over to President Hage Geingob on 3 August 2021 indicated that the Rent Control Bill should be tabled in Parliament for debate and promulgation by December 2021.

Uutoni said on Thursday that the bill was at an advanced stage, but did not indicate when it will be tabled.

AR sues

Meanwhile, Affirmative Repositioning (AR) movement spokesperson Simus Amunime told this agency on Thursday that AR had filed for litigation against the ministry, noting that strategic engagements have failed.

"We have written letters without responses, so we have ceased the engagements with the ministry. We decided to take the legal direction to just go fight them in court because of course strategic engagement has failed," he said.

Amunime claimed that politicians are delaying the tabling of the bill deliberately because the majority of them own rental properties.

-NAMPA

PUBLIC PARTICIPATION NOTICE ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF A FUEL DEPOT IN OPUWO

Geo Pollution Technologies (Pty) Ltd was assigned by TuEFI Trading CC to undertake an environmental assessment for the construction and operation of a fuel depot on Portion F of Opowotown and Townlands No 876, Opowotown, in the Kunene Region.

<http://www.themambos.com/projects/projects.html>

The environmental assessment will be according to the Environmental Management Act of 2007 and its regulations as published in 2013.

TuEFI Trading CC plans to construct and operate a fuel wholesale facility on the said site. General operations will involve the receipt of diesel from road tankers, dispensing fuel to customers on a self-slab area from an above-ground storage tank and day-to-day administrative tasks.

All Interested and Affected Parties are invited to register with the environmental consultant. By registering, you are provided with the opportunity to share any comments, issues or concerns related to the facility, for consideration in the environmental assessment. Additional information can be requested from Geo Pollution Technologies.

All comments and concerns should be submitted to Geo Pollution Technologies by **14 December 2021**.

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PROTECT NAMIBIA'S NATURAL RESOURCES

ELLANIE SART
WINDHOEK

Environment minister Pohamba Shifeta says the need to protect Namibia's natural resources cannot be overemphasised, as it has a profound effect of uplifting the economy and the wellbeing of communities.

He made these remarks during the launch of the clean-up campaign at Terrace Bay, which is located in the Skeleton Coast National Park in the Kunene Region. According to Shifeta the campaign was hosted by founding president Sam Nujoma. Shifeta said the world is faced with the challenge of combatting environmental pollution, which in turn has permanent effects

on the environment and lives.

Skeleton Coast

He said the Skeleton Coast National Park is now the most preserved national park in Namibia, with its rich lichen fields and more than 100 different species.

"It is a sanctuary for desert-dwelling wildlife and hosts the Kunene River Mouth, where the Atlantic Ocean and the Kunene River meets."

According to him this part of the Kunene Region is rich in biological diversity, especially birds and aquatic resources. Shifeta further said the Skeleton Coast National Park makes up one third of Namibia's coastline and its sea resources is untapped and extraordinarily beautiful.

"It is a heavily protected conservation area and the environment ministry regulates entrance to the national park to ensure the protection of this highly sensitive environment."

According to him the ministry has a pivotal role to play in protecting the biological diversity of Namibia, promoting environmental awareness among communities, encouraging participatory environment planning and management and actively involving Namibians in regional environ-

ment issues and programmes.

Priorities

He said the Kunene Regional Council and its stakeholders and the youth in particular should remain steadfast in prioritising environmental management and adopting the concepts of re-using and recycling waste, which will definitely reduce damage to the fragile environment.

Shifeta added that the government has put in place relevant policies and legislations to regulate and ensure sustainable environmental management while at the same time promoting human development.

"To illustrate this, for example, the National Policy on Coastal Management provides for the integration of different legislations for effective planning taking into account both the environment and human developmental needs."

He encouraged Namibians to emulate this initiative by Kunene Regional Council within their respective localities.

"If we do so, I am certain, we will be one of the countries with a clean, safe and productive environment, not only in Africa, but in the world."

ellanie@namibiasun.com

Site Notice



Appendix B: Consultant's Curriculum Vitae

ENVIRONMENTAL SCIENTIST**André Faul**

André entered the environmental assessment profession at the beginning of 2013 and since then has worked on more than 150 Environmental Impact Assessments including assessments of the petroleum industry, harbour expansions, irrigation schemes, township establishment and power generation and transmission. André's post graduate studies focussed on zoological and ecological sciences and he holds a M.Sc. in Conservation Ecology and a Ph.D. in Medical Bioscience. His expertise is in ecotoxicological related studies focussing specifically on endocrine disrupting chemicals. His Ph.D. thesis title was The Assessment of Namibian Water Resources for Endocrine Disruptors. Before joining the environmental assessment profession he worked for 12 years in the Environmental Section of the Department of Biological Sciences at the University of Namibia, first as laboratory technician and then as lecturer in biological and ecological sciences.

CURRICULUM VITAE ANDRÉ FAUL

Name of Firm	:	Geo Pollution Technologies (Pty) Ltd.
Name of Staff	:	ANDRÉ FAUL
Profession	:	Environmental Scientist
Years' Experience	:	20
Nationality	:	Namibian
Position	:	Environmental Scientist
Specialisation	:	Environmental Toxicology
Languages	:	Afrikaans – speaking, reading, writing – excellent English – speaking, reading, writing – excellent

**EDUCATION AND PROFESSIONAL STATUS:**

B.Sc. Zoology	:	University of Stellenbosch, 1999
B.Sc. (Hons.) Zoology	:	University of Stellenbosch, 2000
M.Sc. (Conservation Ecology)	:	University of Stellenbosch, 2005
Ph.D. (Medical Bioscience)	:	University of the Western Cape, 2018

First Aid Class A	EMTSS, 2017
Basic Fire Fighting	EMTSS, 2017

PROFESSIONAL SOCIETY AFFILIATION:

Environmental Assessment Professionals of Namibia (Practitioner)

AREAS OF EXPERTISE:

Knowledge and expertise in:

- ◆ Water Sampling, Extractions and Analysis
- ◆ Biomonitoring and Bioassays
- ◆ Biodiversity Assessment
- ◆ Toxicology
- ◆ Restoration Ecology

EMPLOYMENT:

2013-Date	:	Geo Pollution Technologies – Environmental Scientist
2005-2012	:	Lecturer, University of Namibia
2001-2004	:	Laboratory Technician, University of Namibia

PUBLICATIONS:

Publications:	5
Contract Reports	+150
Research Reports & Manuals:	5
Conference Presentations:	1