DECOMMISSIONING OF A BULK FUEL STORAGE FACILITY AND THE CONSTRUCTION OF A BULK STORAGE FACILITY FOR LIQUEFIED PETROLEUM GAS, WINDHOEK

ENVIRONMENTAL SCOPING REPORT

Assessed by:

Assessed for:

January 2026

Project:	**DECOMMISSIONING OF A BULK FUEL STORAGE FACILITY AND THE CONSTRUCTION OF A BULK STORAGE FACILITY FOR LIQUEFIED PETROLEUM GAS, WINDHOEK: ENVIRONMENTAL IMPACT ASSESSMENT**
Report Version/Date	Final January 2026
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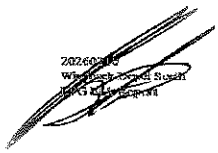
Report Approval	 **Pierre Botha** Managing Director

I NJ. GROBBELAAR, acting as representative of (Vivo Energy Namibia (Pty) Ltd), 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 20 day of FEBRUARY 2026.

Vivo Energy Namibia (Pty) Ltd

F/75/14 (2121 4315)
Company Registration number

EXECUTIVE SUMMARY

Vivo Energy Namibia (Pty) Ltd (the Proponent) appointed Geo Pollution Technologies (Pty) Ltd (GPT) to undertake an environmental scoping report for the decommissioning of a bulk fuel storage facility and the construction of a bulk storage facility for liquefied petroleum gas, on erf 7997, Northern Industrial Area, Windhoek. The environmental assessment is required in terms of the Environmental Management Act (EMA) of 2007 and will serve as guidance for the approval or refusal of an environmental clearance certificate (ECC) for its construction and operations. Once established, the facility will aim to ensure a reliable supply of fuel to residents in the surrounding area.

All existing infrastructure will be decommissioned and removed. This includes the previously used above-ground storage tanks, offices, workshops, store rooms, oil storage, a laboratory and the railway siding. Two liquefied petroleum gas (LPG) storage tanks will be installed (initially one 114 m^3 storage tank, with another similar tank to be installed in future), a LPG loading and unloading road gantry will be constructed as well as a LPG cylinder storage and filling area. Support infrastructure will also be put in place, including a cylinder washing and repair area, as well as offices with ablution. To allow for sufficient backup of firewater availability, firefighting infrastructure will be installed and one firewater storage tank and one water pump house will be constructed on the adjacent Vivo Energy bulk fuel storage facility on erf 3523.

The primary concerns related to the facility's operations include potential health impacts from exposure to LPG vapours, increased traffic and associated noise, and fire hazards. These risks can be mitigated through preventative measures and adherence to Namibian legislation and international best practice standards applicable to the facility's operations. Proper design and placement for above-ground storage tanks and dispensing infrastructure will minimise vapour emissions. Compliance to SANS standards, proper training of staff and maintenance of equipment will prevent leakages and ensure its early detection. Traffic impacts can be managed by enforcing traffic control measures and scheduling deliveries to avoid peak traffic hours. Noise levels should remain within the limits prescribed by the Labour Act (2007) for workers and the City of Windhoek guidelines for limits on noise pollution (Council Resolution 215/09/2006). Fire risks will be managed through strict compliance with SANS standards, appropriate firefighting systems and employee training. By employing local contractors and employees for construction and operation, as well as providing training and skills development, the positive socio-economic impacts of the project will be maximised while negative impacts are minimised.

The environmental management plan (EMP) included in section 8 of this document should be used as a reference during all phases of the facility's operations. All monitoring and records should be documented in a report to ensure compliance with the EMP. Parties responsible for any transgressions of the EMP should be held accountable for any necessary rehabilitation. A health, safety, environment and quality policy, or a similar document should be used alongside the EMP. Operators and responsible personnel must be trained on the contents of these documents. Municipal - or national regulations and guidelines must be adhered to and monitored regularly as outlined in the EMP.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
API	American Petroleum Institute
BLEVE	Boiling Liquid Expanding Vapour Explosion
CHIRPS-2	Climate Hazards Group Infra-Red Precipitation with Station data version 2
cm	Centimetre
cmol/kg	Centimol per kilogram
dBA	A-weighted decibel
DWA	Department of Water Affairs
ECC	Environmental Clearance Certificate
EMP	Environmental Management Plan
EMS	Environmental Management System
ENE	East-Northeast
ESE	East-Southeast
GPT	Geo Pollution Technologies
HIV	Human Immunodeficiency Virus
HSE	Health, Safety & Environment
km	Kilometre
kWh/m²/day	Kilowatt hour per square meter per day
LPG	Liquefied Petroleum Gas
m	Metre
m³	Cubic metre
MEFT	Ministry of Environment, Forestry and Tourism
MERRA-2	Modern-Era Retrospective analysis for Research and Applications version 2
mg/cm³	Milligram per cubic centimetre
mm	Millimetre
mm/a	Millimetres per annum
MME	Ministry of Mines and Energy
MSDS	Material Safety Data Sheet
NamWater	Namibia Water Corporation Ltd Pty
NE	Northeast
PPE	Personal Protective Equipment
SANS	South African National Standards
SCADA	Supervisory Control and Data Acquisition

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 - A body or person empowered under the local authorities act or Environmental Management Act to enforce the rule of law.

Construction - 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 –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.

LPG - 'liquefied petroleum gas' means a petroleum product which consists mainly of propane or butane or both and which can be stored as a liquid under relatively low pressure for use as a fuel. LPG is naturally odourless, but Ethyl Mercaptan is added to create a distinct, pungent smell for safety reasons.

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, Forestry and 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 - A 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, INTRODUCTION AND JUSTIFICATION

Geo Pollution Technologies (Pty) Ltd (GPT) was appointed by Vivo Energy Namibia (Pty) Ltd (the Proponent) to undertake an environmental scoping report for the decommissioning of a bulk fuel storage facility and the construction of a bulk storage facility for liquefied petroleum gas, on erf 7997, Iscor Street, Northern Industrial area, Windhoek (Figure 1-1). The main operational activities will include:

- Decommissioning and removal of bulk fuel storage infrastructure;
- Removal of all other existing infrastructure;
- Construction of bulk storage tanks for LPG and related infrastructure;
- Loading and unloading of LPG;
- Handling and storage of LPG;
- Dispensing and sales of LPG to customers, and
- Daily maintenance activities.

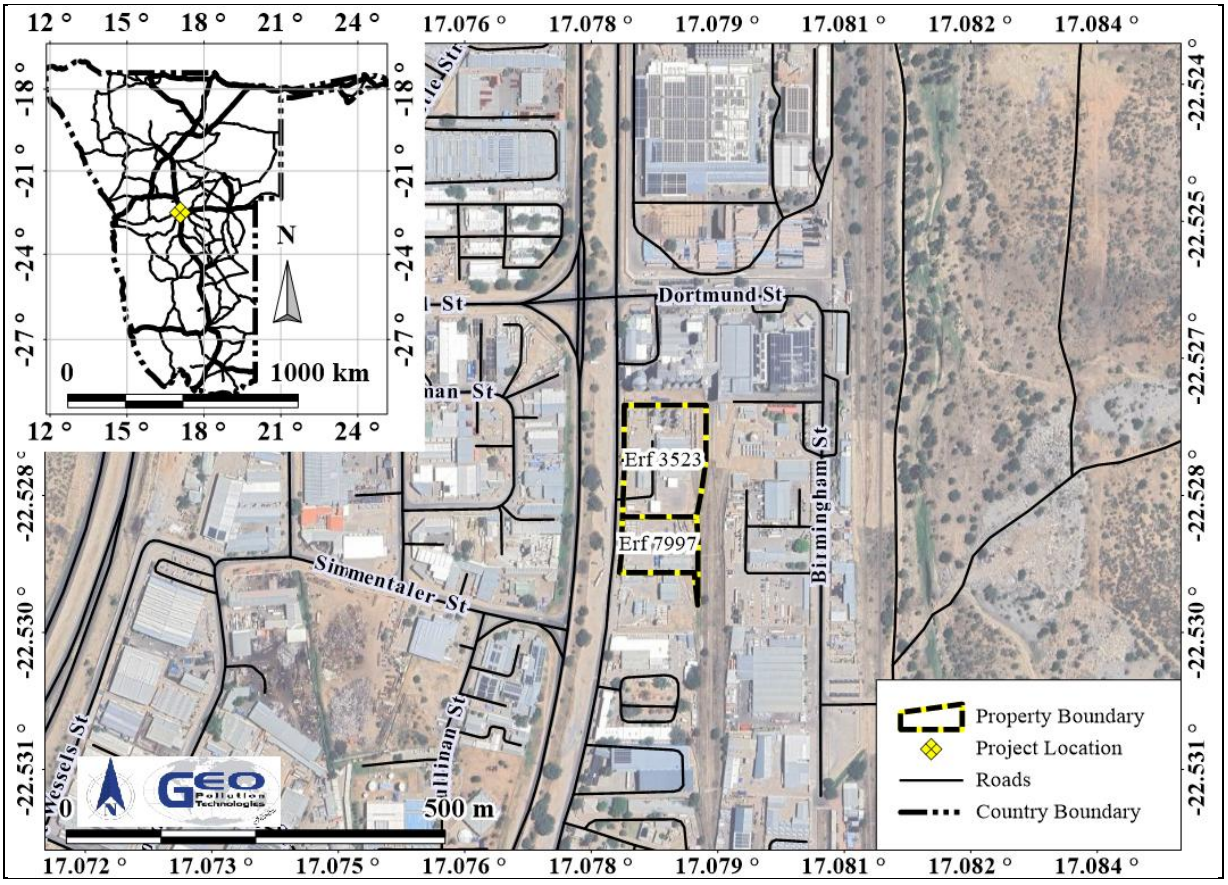


Figure 1-1 Project location

A risk assessment was undertaken to determine the potential impacts of the decommissioning, as well as the construction and operational activities of the new facility, 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 (ECC) in compliance with Namibia's Environmental Management Act (Act No 7 of 2007) (EMA).

Project justification – The former Engen fuel depot located on Iscor Street was acquired by Vivo Energy Namibia (the Proponent) as part of a broader portfolio acquisition of Engen-owned assets. Vivo Energy already operates in close proximity to the former Engen site and the two facilities are adjacent

neighbours. As such, there is no operational or strategic justification for maintaining two fuel depots serving the same company within the same area.

In response, the Proponent has identified the former Engen depot as a suitable site for repurposing into a bulk liquefied petroleum gas (LPG) storage and handling facility. The proposed LPG storage facility will address the growing demand for gas within the industrial - and surrounding areas. By providing a reliable and conveniently located supply of LPG, while reducing traffic congestion caused by large vehicles elsewhere in the city when delivering or collecting LPG. The development is expected to create employment opportunities during both the construction and operational phases and contribute to local economic activity.

2 SCOPE

The scope of this report is to:

- Present a detailed project - and environmental description related to the Proponent's activities,
- Determine the potential environmental impacts emanating from the Proponent's decommissioning, construction and daily operational activities,
- Comply with Namibia's Environmental Management Act (2007),
- Identify a range of management actions to mitigate the potential adverse impacts to acceptable levels, and
- Provide sufficient information to the relevant competent authority and the Ministry of Environment, Forestry and Tourism (MEFT) and related authorities to make an informed decision regarding the project and the issuing of an environmental clearance certificate.

3 METHODOLOGY

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

- Baseline information about the site and its surroundings was obtained from existing secondary information as well as from a reconnaissance site visit.
- 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.
- As per the findings of this environmental assessment, a scoping report with an environmental management plan (EMP) was prepared, and this will be submitted to the MEFT.

4 DECOMMISSIONING, CONSTRUCTION AND OPERATIONS

The site previously under the ownership of Engen, functioned as a bulk fuel storage and distribution facility. Following acquisition by the Proponent, the intention is to repurpose the site into a bulk storage and distribution facility for LPG. In order to facilitate this transition, all existing infrastructure associated with the former fuel storage operations will be systematically decommissioned and removed. Subsequently, new infrastructure will be constructed to enable the safe storage and handling of LPG at the site.

4.1 DECOMMISSIONING PHASE

The facility currently comprises various infrastructure components related to bulk fuel storage. This includes the previously used above-ground storage tanks, offices, workshops, store rooms, oil storage, firefighting equipment, a laboratory and the railway siding. Infrastructure on-site have supported the daily operations on the premises, as detailed in the site layout map referenced in Figure 4-1. All the existing infrastructure will be decommissioned and removed.

Proper disposal procedures will be followed to eliminate any risk of contamination, especially considering the previous use of above-ground tanks for fuel storage and the potential for hydrocarbon residues on various surfaces.

In August 2024, GPT conducted an environmental conditions survey to evaluate the degree of hydrocarbon contamination resulting from ongoing site activities (Botha and Short, 2024). The assessment identified some hydrocarbon contamination, primarily attributed to historic surface spills. Importantly, the survey confirmed that the contamination remains superficial and has not migrated vertically; no chemicals of concern were detected at greater depths. Consequently, the contamination does not pose a significant risk to the surrounding environment.

The findings from the environmental survey indicate that decommissioning and removal of the existing infrastructure can proceed without the need for extensive rehabilitation or contamination remediation. Allowing the Proponent to implement new infrastructure and enhanced health, safety and environmental safeguards in line with the development of the new LPG facility.

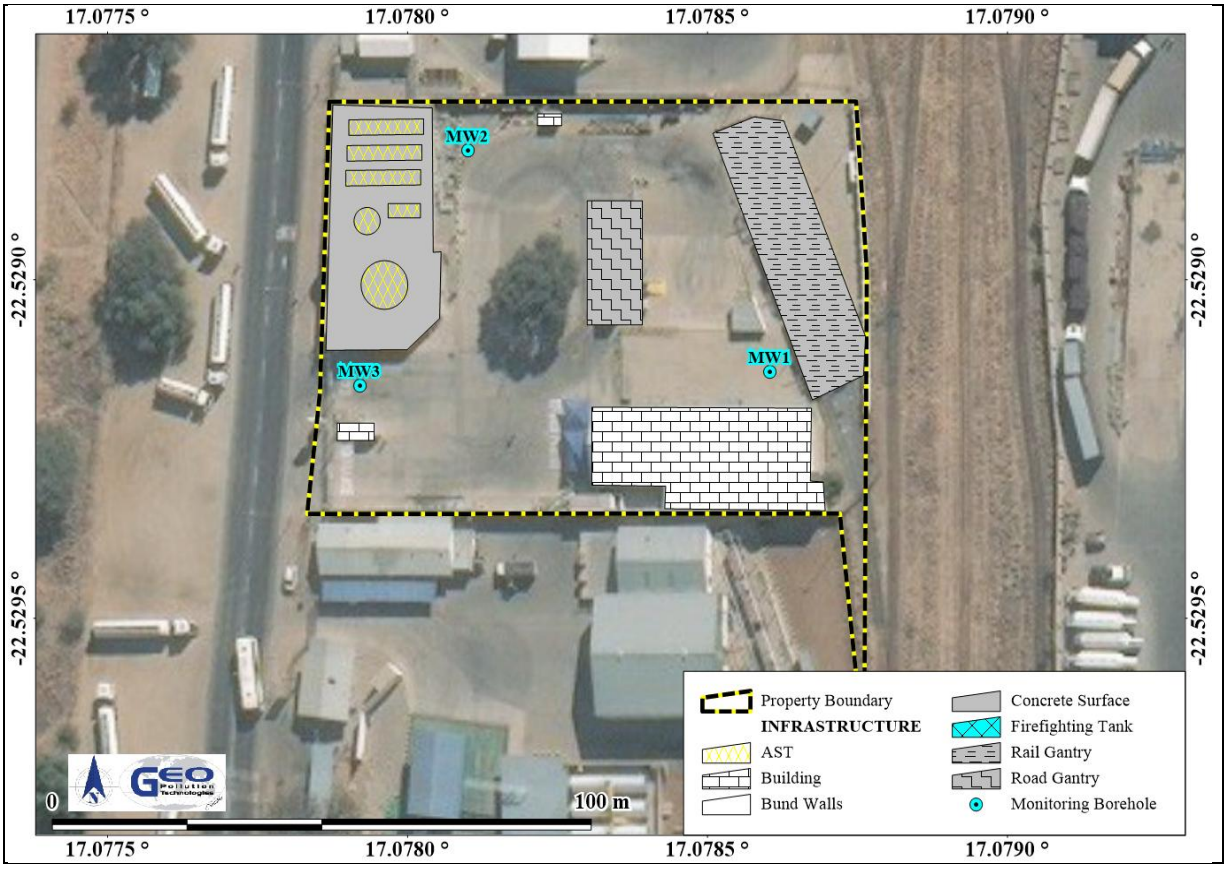


Figure 4-1 Current site layout

Photo 4-1 Rail gantry

Photo 4-2 Office block with associated infrastructure on-site

Photo 4-3 Bulk fuel storage tanks

Photo 4-4 Fire suppression system

4.2 CONSTRUCTION PHASE

Following the decommissioning of the existing infrastructure, several key elements will be constructed on-site that are associated with a bulk LPG storage and distribution facility.

Two LPG storage tanks will be installed (initially one 114 m^3 storage tank, with another similar tank to be installed in future). A dedicated road loading and unloading gantry will be constructed to facilitate the transfer of LPG to these tanks. In addition to the main storage tanks and gantry, components will be established for the storage and filling of gas cylinders with LPG, this will ensure efficient and secure handling of the product.

To maintain the integrity and functionality of the gas cylinders, additional storage infrastructure dedicated to washing, servicing and repairing the cylinders will be constructed. Additional storerooms will be provided for the storage of mineral oil and lube barrels, supporting the operational requirements of the site. To allow for sufficient backup firewater availability, firefighting infrastructure will be installed and one firewater storage tank and one water pump house will be constructed on the adjacent Vivo Energy Bulk Fuel Storage facility on erf 3523.

To support daily operations, an administrative office, security facilities and ablution blocks will be constructed. These facilities are essential for accommodating employees and ensuring the efficient management of activities on the site.

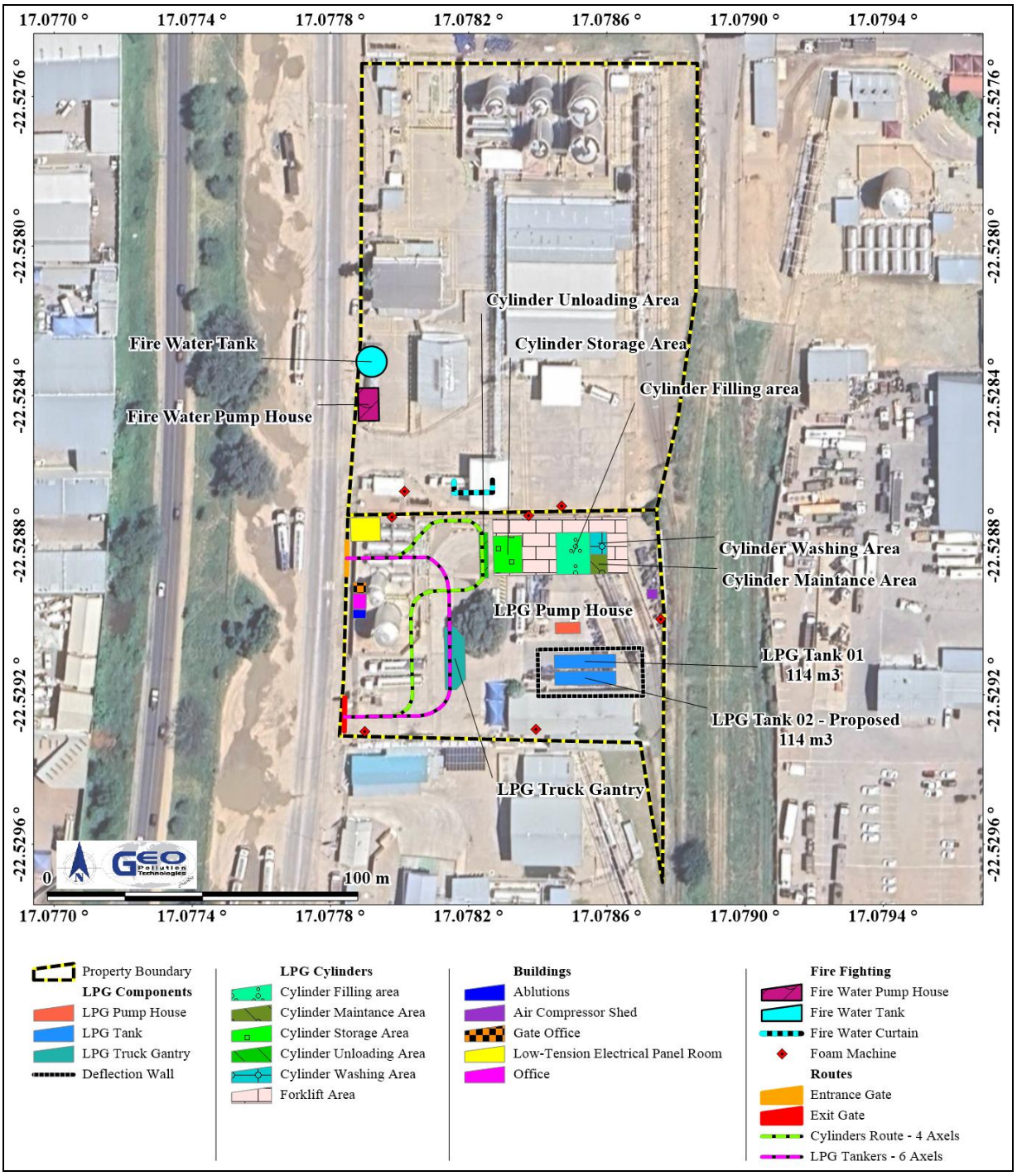


Figure 4-2 Proposed LPG site layout

4.3 OPERATIONAL PHASE

Normal operations associated with a bulk LPG storage facility and filling operations will continue on the site. This mainly involves the receipt of LPG from road tankers, its storage in bulk tanks dispensing of the LPG into smaller cylinders. These filled cylinders are then supplied to customers as required. The filling of cylinders, facilitation of gas sales, and regular cleaning of the site are key components of daily activities, ensuring both safety and operational efficiency.

To maintain high standards of safety and facility functionality, regular maintenance activities will be undertaken. These include minor repairs to infrastructure, general upkeep of the bulk storage facility and maintenance of associated infrastructure. Typical maintenance tasks may involve pressure testing, painting, servicing of equipment and other minor construction or repair activities

as necessary. This ongoing maintenance programme is essential for the continued safe operation of the facility.

5 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 5-1 to Table 5-4 govern the environmental assessment process in Namibia and/or are relevant to the facility.

Table 5-1 Namibian law applicable to the LPG bulk storage facility

Law	Key Aspects
The Namibian Constitution	♦ Promotes 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	♦ Defines the environment ♦ Promotes sustainable management of the environment and the use of natural resources ♦ Provides a process of assessment and control of activities with possible significant effects on the environment
Environmental Management Act Regulations Act No. 7 of 2007, Government Notice No. 28-30 of 2012	♦ 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	♦ Regulates petroleum industry ♦ Makes provision for impact assessment ♦ Petroleum Products Regulations (Government Notice No. 155 of 2000) ♦ Prescribes South African National Standards (SANS) or equivalents for construction, operation and decommissioning of petroleum facilities (refer to Government Notice No. 21 of 2002) ♦ Used Mineral Oil Regulations (Government Notice No. 48 of 1991 ♦ Regulations relating to the purchase, sale, supply, acquisition, possession, disposal, storage, transportation, recovery and re-refinement of used mineral oil
Water Resources Management Act Act No. 11 of 2013, Government Notice No. 332 of 2013	♦ Provide for management, protection, development, use and conservation of water resources ♦ Prevention of water pollution and assignment of liability
Local Authorities Act Act No. 23 of 1992, Government Notice No. 116 of 1992	♦ Define the powers, duties and functions of local authority councils ♦ Regulates discharges into sewers
Public and Environmental Health Act Act No. 1 of 2015, Government Notice No. 86 of 2015	♦ 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	♦ 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	♦ 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

Law	Key Aspects
Hazardous Substances Ordinance Ordinance No. 14 of 1974	♦ 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)	♦ Not in force yet ♦ Provides for prevention and control of pollution and waste ♦ Provides for procedures to be followed for licence applications
Downstream Gas Bill (Draft document 2025)	♦ To establish a national regulatory framework for the downstream gas industry in Namibia; ♦ establish a licensing system for downstream gas undertakings; ♦ ensure safety, efficiency and environmental responsibility; ♦ make provision for health, safety and technical standards in connection with downstream gas supply; ♦ provide for the powers and obligations of licensees; ♦ regulate tariffs; and provide for incidental matters

Table 5-2 City of Windhoek regulations, plans and policies

Item	Key Aspects
Groundwater Protection Regulations	♦ Provides for the protection of groundwater, landscape and vegetation sensitivity ♦ Requires an EIA and EMP for projects that may potentially impact on groundwater ♦ Identifies three groundwater control zones: medium, high and very high
Windhoek Environmental Structure Plan and Environmental Policy	♦ Integrates spatial planning decision-making, environmental planning and environmental impact management
Town Planning Scheme	♦ Enables the comprehensive management of all property and related public sector functions across the city ♦ Provides for the protection of groundwater and the environment ♦ Prohibits any sewer, septic tank, pit latrine, VIP or French drain within 500 m of any private or production borehole without council's consent ♦ Sets the Southern Development Limit for Windhoek
Municipal Council of Windhoek: Noise Control Regulations General Notice No. 77 of 2006	♦ Resolution 215/09/2006 dealing with noise ♦ Impose various noise limits for residential, commercial and industrial areas for day and night time. ♦ Restricts noise reaching single residential areas at 55 dBA during the day and 45 dBA at night
Drainage and Sewage Regulations	♦ Regulates discharges into sewer systems ♦ Provides standards to which effluents entering a sewer system must adhere ♦ Regulates storm water run-off

Table 5-3 Relevant multilateral environmental agreements for Namibia and the development

Agreement	Key Aspects
Stockholm Declaration on the Human Environment, Stockholm 1972	♦ 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	♦ 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)	♦ 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	♦ Under article 14 of The Convention, EIAs must be conducted for projects that may negatively affect biological diversity

Table 5-4 Standards or codes of practice

Standard or Code	Key Aspects
South African National Standards (SANS)	♦ Defines rules to ensure safe use of LPG ♦ Prevents risks to human health and the environment ♦ Provides a framework for storing LPG ♦ Guidelines for installation and operations

The storage facility is listed as an activity requiring an ECC 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." (The facility will store and handle hazardous substances in the form of LPG).
- 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." (The facility stores and handles hazardous substances in the form of LPG products, which is permitted by the Ministry of Mines and Energy (MME).
- 9.4 "The storage and handling of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location." (Total LPG storage capacity is more than 30 m^3).
- 9.5 "Construction of filling stations or any other facility for the underground and above-ground storage of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin." (The facility is a refill station that will store LPG products in above-ground tanks).

6 ENVIRONMENTAL CHARACTERISTICS

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

6.1 LOCALITY AND SURROUNDING LAND USE

The facility is located on Erf 7997 (22.529041°S and 17.078299°E), Iscor Street, in the Northern Industrial Area of Windhoek (Figure 1-1), situated in the Khomas Region. The primary land use of the project area is industrial, with the site currently utilised for activities such as the storage and distribution of petroleum products.

The immediate surroundings of the project area are characterised by similar industrial developments. To the north of the facility is the Vivo fuel depot, while to the south lies the Puma fuel depot. On the western side of the project area, across Iscor Street, an open field is located which is mostly used by heavy vehicles for turning and parking. To the east, the facility is bordered by Autohaus Truck and Bus. It is anticipated that the ongoing operations at the project site will not have any adverse impact on the neighbouring properties, given the industrial nature of the surrounding land uses.

Photo 6-1 Southern view from site

Photo 6-2 Northern view from site

Photo 6-3 Western view from site

Photo 6-4 Eastern neighbour

Implications and Impacts

The project area is situated within the Northern Industrial area, which is earmarked for industrial activities. The surrounding properties are occupied by businesses and facilities belonging to similar industries. As a result, the operational activities carried out on the site are consistent with the dominant land use in the area. Construction activities will be secured and managed in line with planning requirements, ensuring that no significant negative impacts are expected on nearby or adjacent businesses.

6.2 CLIMATE

According to the Köppen-Geiger Climate Classification system, the project is located in a hot semi-arid climate (BSh) (http://koeppen-geiger.vu-wien.ac.at/present.htm). This means that the area receives precipitation below potential evapotranspiration, but not as low as a desert climate and has a mean annual temperature of at least 18°C. Long-term precipitation data were obtained for the project area from the CHIRPS-2 dataset (Climate Hazards Group Infra-Red Precipitation with Station data version 2).

The CHIRPS-2 dataset consists of long-term precipitation data (1981 to near-present) obtained from satellite imagery and in-situ station data and therefore represents more recent data. Data is averaged over an area of roughly 5 km by 5 km. This averaging effect should be kept in mind during data analyses, as high precipitation from single thunderstorm cells would be averaged out, thereby providing a reduced daily maximum precipitation value (Funk *et al*., 2015).

Based on the CHIRPS-2 data set, the average precipitation is 319 mm/a for the last 43 years, with a coefficient of variance of 34 %. Heavier precipitation (single-day events) occurs between January and April, with a single-day maximum precipitation of 53 mm recorded in April over the last 43 years. The precipitation data is presented in Figure 6-1 and Table 6-1. Seasonal (July to

June) total precipitation, centred on the average line for the last 43 years (1981 to present), is presented, with the daily total precipitation and the seasonal cumulative precipitation. From the figure, it is clear that the precipitation for 7 of the last 10 seasons was all below average. The potential evapotranspiration is 2,500 to 2,600 mm/a. By dividing the mean annual potential evapotranspiration by the mean annual precipitation, an aridity index value for the area was computed as 0.12, which indicates the area to be arid.

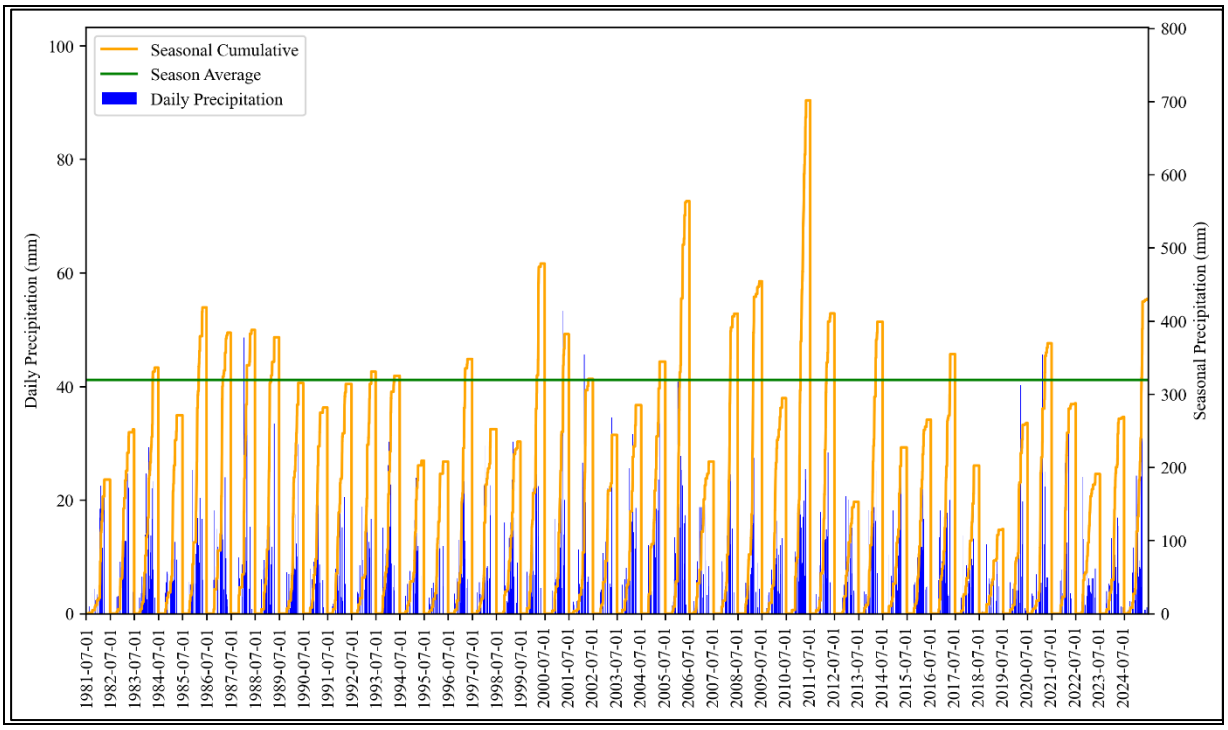


Figure 6-1 Daily and seasonal precipitation (Funk *et al*., 2015)

Table 6-1 CHIRPS-2 precipitation statistics (Funk *et al*., 2015)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Minimum (mm)	12	19	9	6	0	0	0	0	0	0	5	7
Maximum (mm)	265	259	151	134	9	4	0	1	7	44	64	104
Average (mm)	76	86	59	33	1	0	0	0	2	11	20	32
Variability (%)	70	58	63	87	210	303	374	392	139	93	69	70
Daily maximum (mm)	49	46	43	53	9	4	0	1	5	24	25	25
Average rain days	8	9	6	3	0	0	0	0	1	2	4	5

Season July - June average: 319 mm | Season coefficient of variation: 34 %

Date range: 1981-July-1 to 2025-June-30 | Lat: 22.52904°S; Long: 17.07830°E

Monthly temperature data were retrieved from the Modern-Era Retrospective analysis for Research and Applications version 2 (MERRA-2) data set for a height of 2 m above the surface (Gelaro *et al*., 2017). This data set is a NASA atmospheric reanalysis, incorporating satellite data integration and aims at historical climate analyses at 0.5 ° x 0.625 ° spatial resolution. Table 6-2 presents statistics of daily data abstracted from the data set for the last 43 years. The lowest temperature (-4°C) over the data period was recorded in July, with an average of two days in July being below freezing point. A maximum temperature of the data period of 38°C was measured in December. Direct normal solar irradiance for the area is 7.778 kWh/m²/day.

Table 6-2 Temperature statistics based on MERRA-2 data (Gelaro *et al*., 2017)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Minimum (°C)	5	8	6	3	-1	-4	-4	-3	-2	1	3	7
Maximum (°C)	38	38	37	34	30	27	28	31	35	38	38	38
Average (°C)	24	23	22	20	17	13	13	16	20	23	24	24
Diurnal (°C)	15	14	14	15	16	17	17	18	18	17	17	16
Average days < 0°C	0	0	0	0	0	1	2	1	0	0	0	0

Wind data presented in Figure 6-2 and in Figure 6-3 was sourced from the ERA5 data set from 2000 to 2025 (Hersbach, 2020). ERA5 is a fifth generation European Centre for Medium-Range Weather Forecasts (ECMWF) atmospheric reanalysis of the global climate. ERA5 provides hourly estimates of atmospheric, land and oceanic climate variables on a 0.25° grid. ERA5 data is produced by the Copernicus Climate Change Service (C3S) at ECMWF and wind data at a height of 10 m above surface was downloaded from this facility.

Winds at the project area is mostly a light air to moderate breeze (Figure 6-2). During summer, the wind mainly blows from the southeast, while during autumn the wind becomes more east-northeasterly and in winter northeasterly with a moderate breeze at times from the northwest. During summer the wind is mostly from the east-southeast and west-northwest. The wind during winter and spring tends to be slightly of higher speeds. Wind speed in the mornings (Figure 6-3) are generally higher (up to a moderate breeze) from the northeast, increasing trough the afternoons and coming more stronger from the west-northwest. During the evenings the wind to become mainly calm to a light breeze with no dominant direction. At night a more southeasterly calm to gentle breeze can be expected.

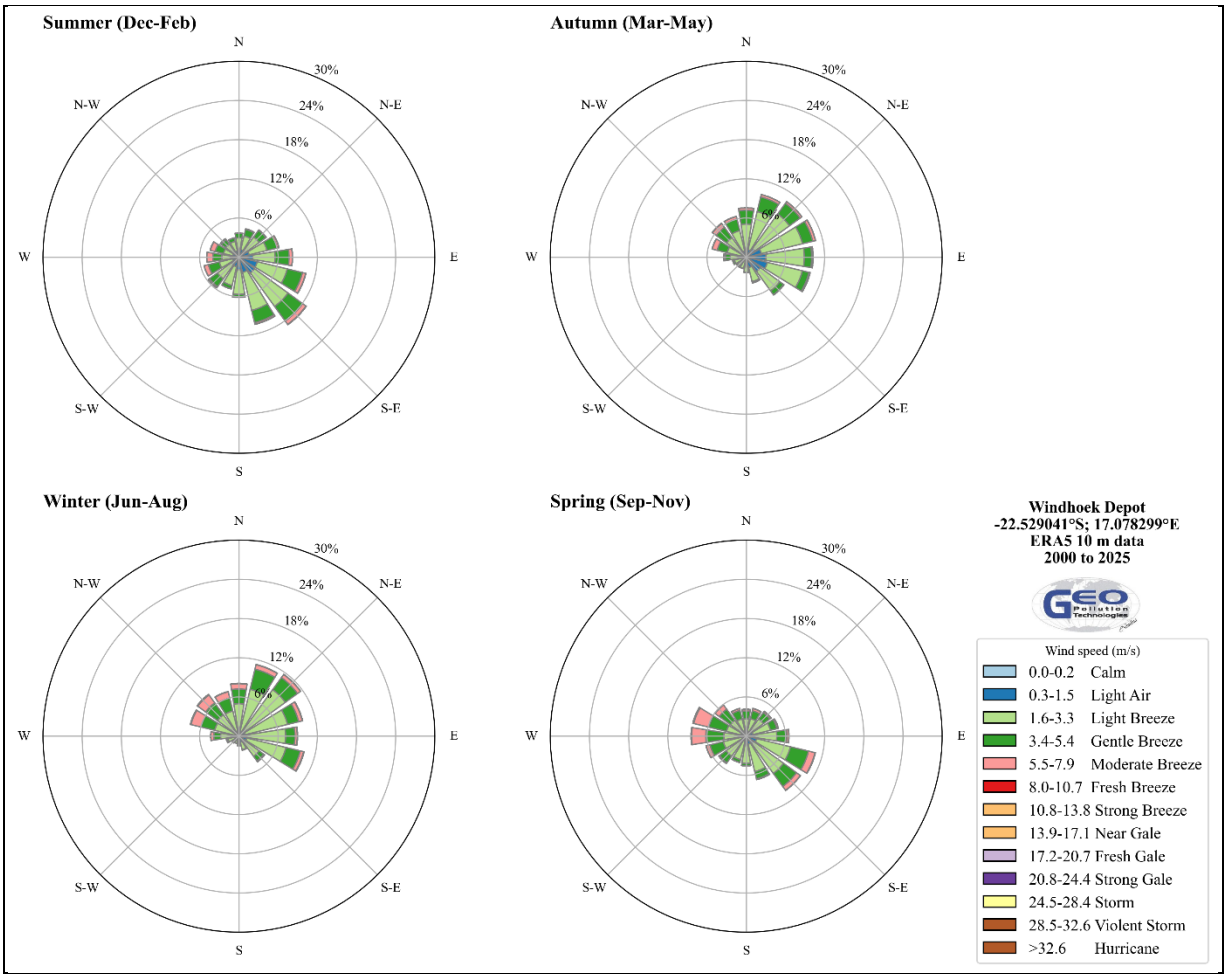


Figure 6-2 Seasonal wind rose - 2000 to 2025 (ERA4 10m data)

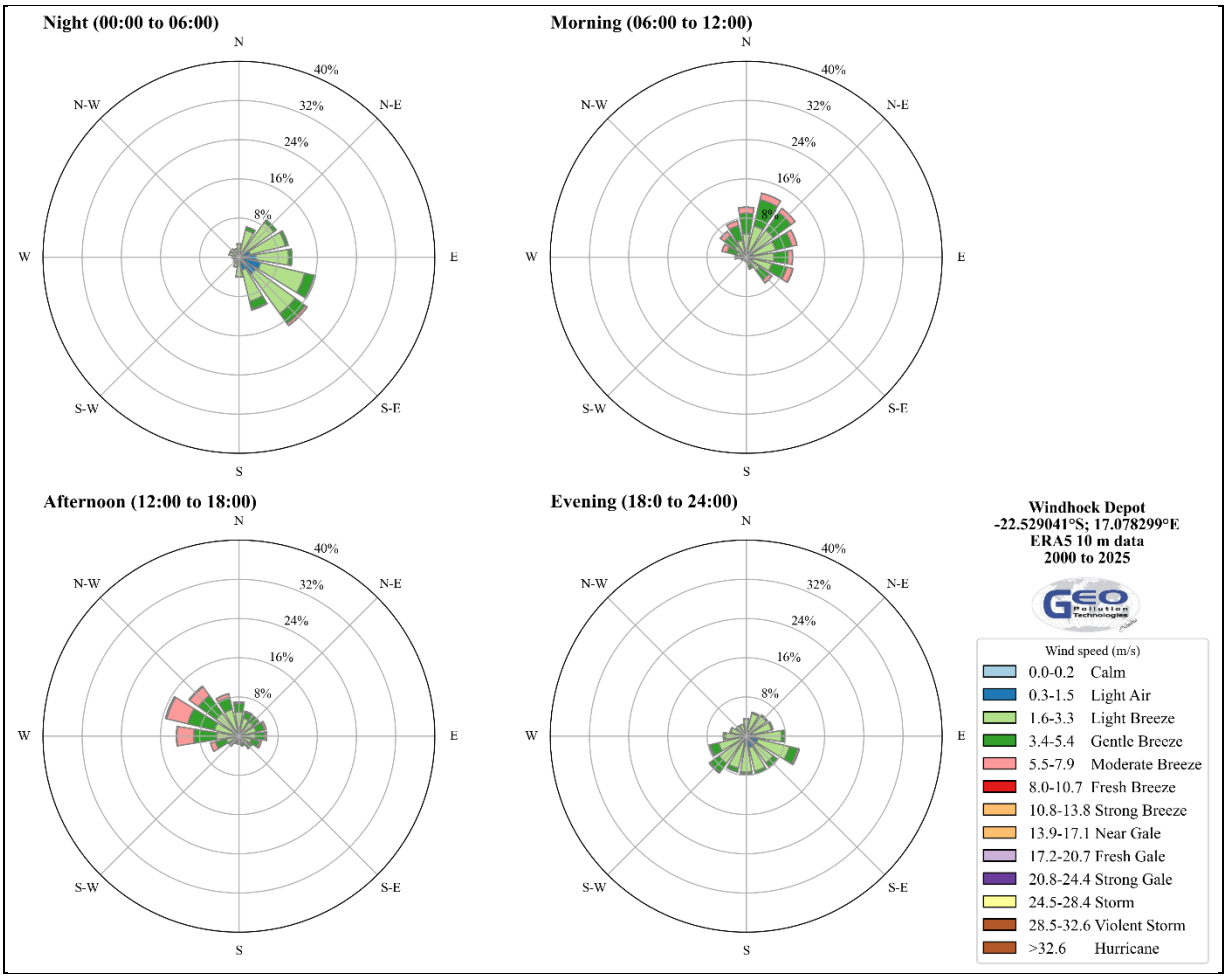


Figure 6-3 Quarter day wind rose- 2000 to 2025 (ERA4 10m data)

Implications and Impacts

The climate of Windhoek is characterised by arid conditions, with the region frequently experiencing intense thunderstorms and short-lived "cloudbursts" during the rainy season. These episodes of heavy rainfall over brief periods can result in flash flooding, leading to the rapid pooling of water across the landscape. Such events also increase the risk of contaminated surface runoff infiltrating the environment, as water flows quickly across surfaces, potentially carrying pollutants into surrounding areas and water systems.

Wind conditions will determine the spread of LPG during a leak. It is important to avoid downwind areas during a leak.

6.3 TOPOGRAPHY AND DRAINAGE

The regional topography of the area can be described as a wide graben valley sloping north inside the surrounding hilly terrain. The valley floor is relatively flat compared to the surrounding terrain (Khomas Hochland to the west and Eros Mountains to the east) where moderate to steep slopes are the norm. A very distinct mountain range (Auas Mountains) cuts across the valley south of the city and divides the valley into two parts, with the southern part draining to the south and the northern part (where the project area is located), draining to the north. The site has been levelled with a slight dip of 1 m to the west of the site (average elevation is 1627 m). The project area is located in the Klein Windhoek River catchment, a tributary of the Swakop River (Figure 6-4).

Natural drainage channels were altered during the site establishment, more than 22 years ago. The on-site surface drainage is heavily impacted by anthropogenic activities, but is expected to be mainly in an eastern direction into the Klein Windhoek River. With urbanisation, increased coverage (e.g. concrete, tar and/or interlocks) of developed land and storm water drainage systems

will significantly increase runoff rates of the surrounding areas. Nearby geological structures may provide preferential pathways to sensitive groundwater resources and this should be protected at all cost as groundwater is utilized in the area.

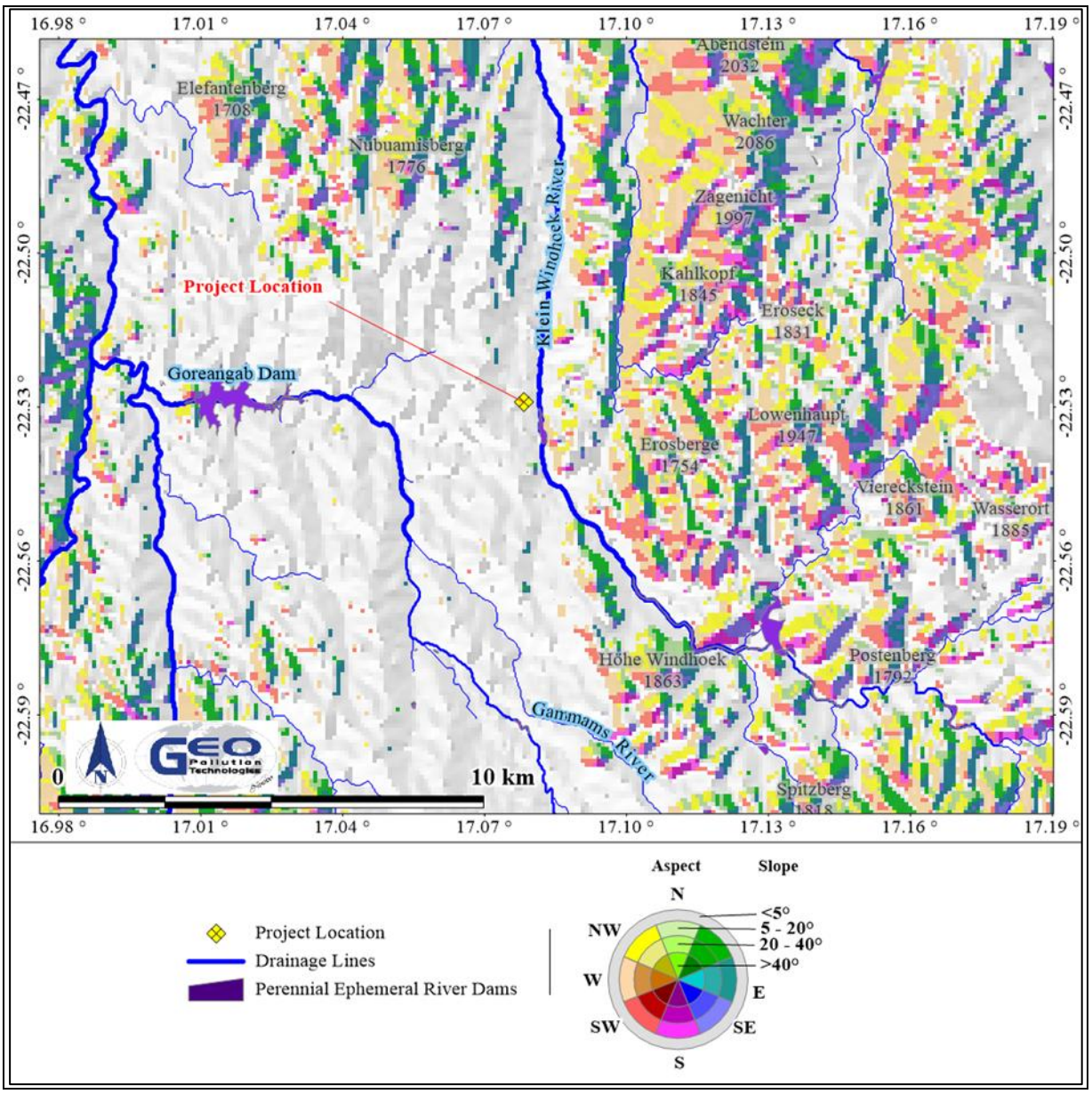


Figure 6-4 Aspect slope and drainage map

Implications and Impacts

Any pollutants that are not contained and are transported via surface water may be transported off-site to the surrounding environment. Therefore, the storage and handling of hazardous substances must be strictly controlled according to industry best practise requirements.

6.4 SOIL

The dominant soil type for this area is Technosol (Figure 6-5), which refers to soils dominated by technical artefacts, such as landfill or cinders. Originally the soil was alluvial deposit (sand). The composition of soil in this particular area is roughly 65-70% sand, 15-20% silt and 20-25% clay, which gives it the characteristics and texture of Sandy Clay Loam soil. Bulk density was computed to be 1,400 and 1,450 mg/cm³, which imply that the soil will affect the root growth of various plants, but not necessarily restrict it. Soils in this area typically reach depths of >190 cm,

have a pH of 6-6.5 and a cation exchange capacity of 13-16 cmol/kg. Furthermore, this region has a water capacity of 40-60 mm at root depth (De Pauw *et al*., 1998).

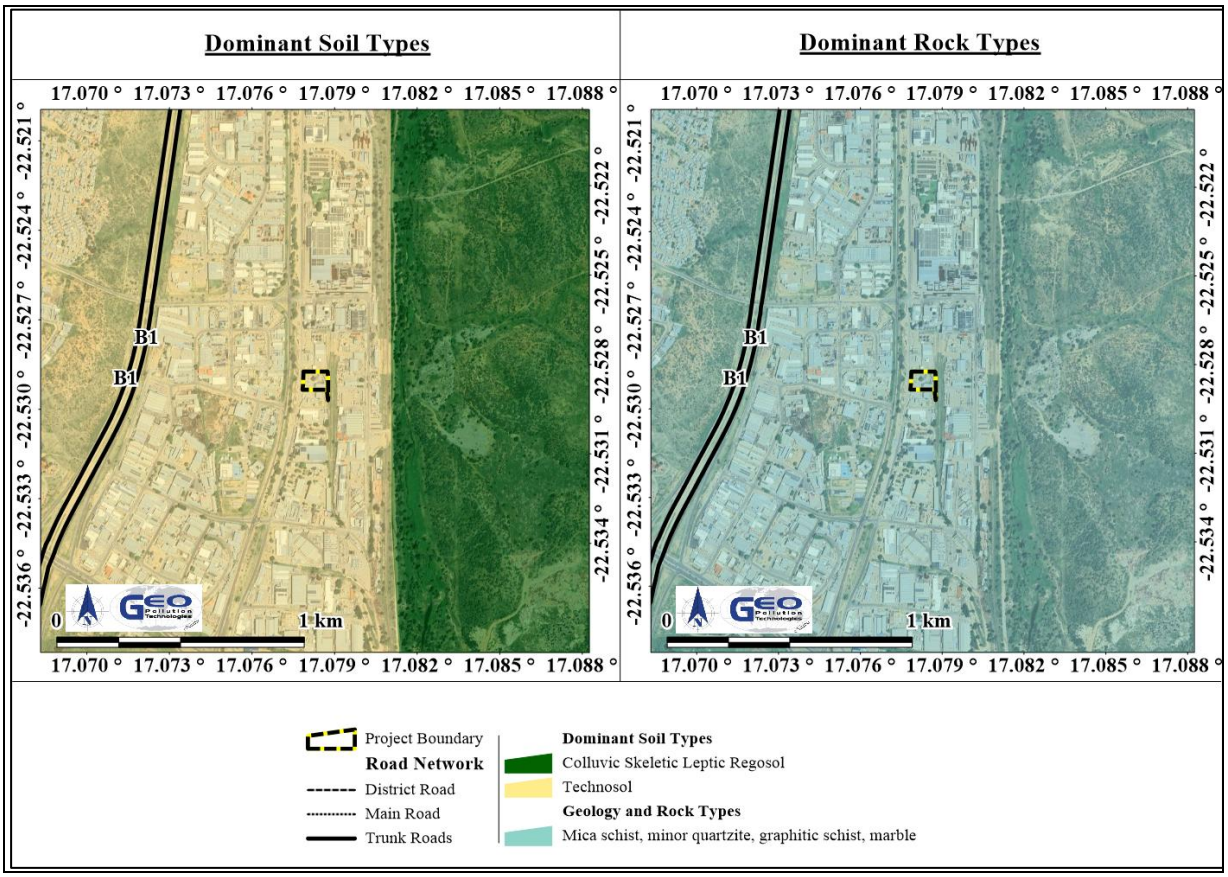


Figure 6-5 Soil and rock type map

Implications and Impacts

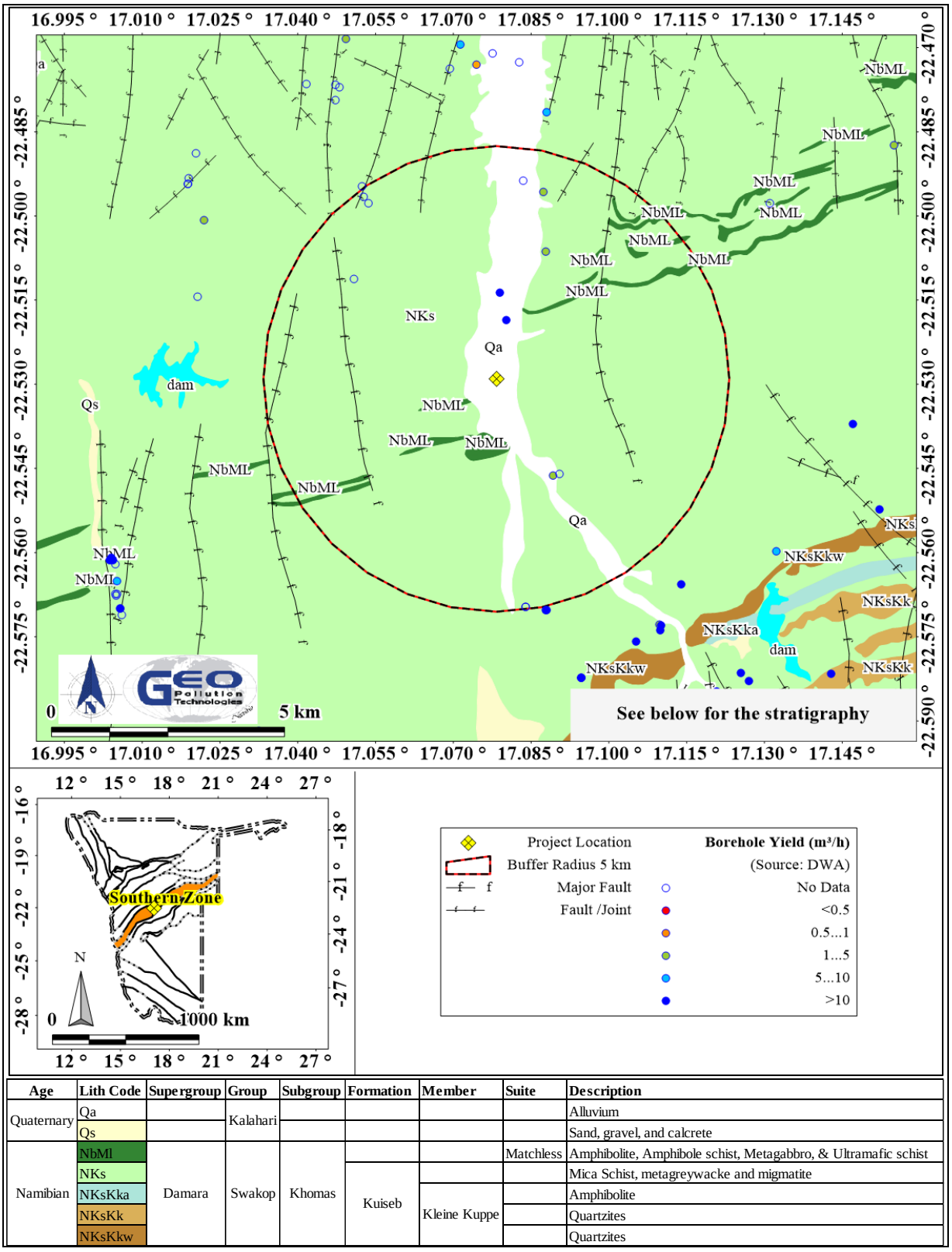
The predominant soil type within the project area is Technosol, which has developed over time as a result of ongoing disturbance and accumulation of materials. This process has led to the formation of soil that is significantly influenced by human activity and technical artefacts. The characteristics of Technosol in this context are particularly well-suited to the current and planned land use for the project area. As such, the soil properties provide a stable and appropriate foundation for development, aligning with the intended purposes of the site.

6.5 GEOLOGY AND HYDROGEOLOGY

Metasedimentary rocks of the Namibian Age constitute the regional geology of the study area, consisting of rocks from the Damara Sequence. The Damara Sequence is locally subdivided into the Kuiseb Formation of the Swakop Group. The Kuiseb Formation consists of amphibolite, schist, micaceous quartzite and quartzite. The project area is situated on an alluvial deposit (sand) which is underlain by the Kuiseb Formation (Figure 6-6).

The structural geology of the Windhoek area is complex as a result of numerous episodes of folding, faulting, thrusting and rifting. Several north-to-northwesterly striking faults and joints found in Windhoek form major underground water conduits and therefore determine the conditions of the aquifer. These faults are associated with the graben structure and are considered important groundwater conduits. A shallow colluvial basin (quaternary sediments) overlays these formations within the Windhoek Graben Valley. Host rock fracturing along fault planes results in better development of secondary porosity in quartzite compared to schistose terrain, which is prone to plastic deformation rather than brittle fracturing. The quartzite, therefore, exhibits significantly higher secondary porosity and permeability compared to the micaceous schist. The

project area is situated on quaternary sediments (Qa) and thus has a medium geological sensitivity (Figure 6-6).



Age	Lith Code	Supergroup	Group	Subgroup	Formation	Member	Suite	Description
Quaternary	Qa		Kalahari					Alluvium
	Qs							Sand, gravel, and calcrete
Namibian	NbMl	Damara	Swakop	Khomas			Matchless	Amphibolite, Amphibole schist, Metagabbro, & Ultramafic schist
	NKs				Kuiseb			Mica Schist, metagreywacke and migmatite
	NKsKka					Kleine Kuppe		Amphibolite
	NKsKk							Quartzites
	NKsKkw							Quartzites

Figure 6-6 Geological map & lithological succession

The groundwater level in the area is expected to be more than 8 m below the surface. Groundwater flow is expected to take place through primary porosity in the surface cover, while it is expected to flow along fractures, faults (secondary porosity) and other geological structures present within the underlying formations (hard rock formations). Groundwater flow from the site can be

expected in a northerly direction. Local flow patterns may vary due to groundwater abstraction. Water is utilised in the area, with at least 14 boreholes known of within a 5 km radius. Table 6-3 presents groundwater statistics of boreholes contained in the Department of Groundwater (DWA) database. Note that this database is generally outdated and more boreholes might be present.

Based on the Windhoek Environmental Structure plan the project area falls within a zone of medium geological sensitivity due to the underlying geology. The project area is situated in the Okahandja Groundwater Basin (Figure 6-7). Flow along preferred flow paths might be in different directions, but the larger-scale flow is expected to be in a northerly direction. The project area falls in the Windhoek-Gobabis Subterranean Water Control Area (Extension). The project area is therefore a water controlled area and groundwater is regulated by Government. Groundwater remains the property of the Government of Namibia.

Table 6-3 Groundwater statistics

	Depth (m)	Yield (m^3/h)	Waterlevel (m)	Waterstrike (m)	TDS (ppm)	SO_4 (ppm)	NO_3 (ppm)	F (ppm)
Datapoints	7	7	7	14	10	8	6	10
Minimum	38	2	8	0	30	5	0.1	0.2
Average	139	28	13	13	731	155.5	14.3	1.7
Maximum	524	62	24	64	2567	510	36.0	4.4
Group A	***0-50***	***>10***	***0-10***	***0-10***	***0-1000***	***0-200***	***0-10***	***0-1.5***
	2	4	4	9	8	6	3	6
Group B	***50-100***	***5-10***	***10-50***	***10-50***	***1000-1500***	***200-600***	***10-20***	***1.5-2.0***
	3	0	3	4	1	2	1	1
Group C	***100-200***	***0.5-5***	***50-100***	***50-100***	***1500-2000***	***600-1200***	***20-40***	***2.0-3.0***
	1	3	0	1	0	0	2	0
Group D	***>200***	***0-0.5***	***>100***	***>100***	***>2000***	***>1200***	***>40***	***>3***
	1	0	0	0	1	0	0	3

14 boreholes in a 5.0 km radius from 22.52904°S 17.07830°E

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

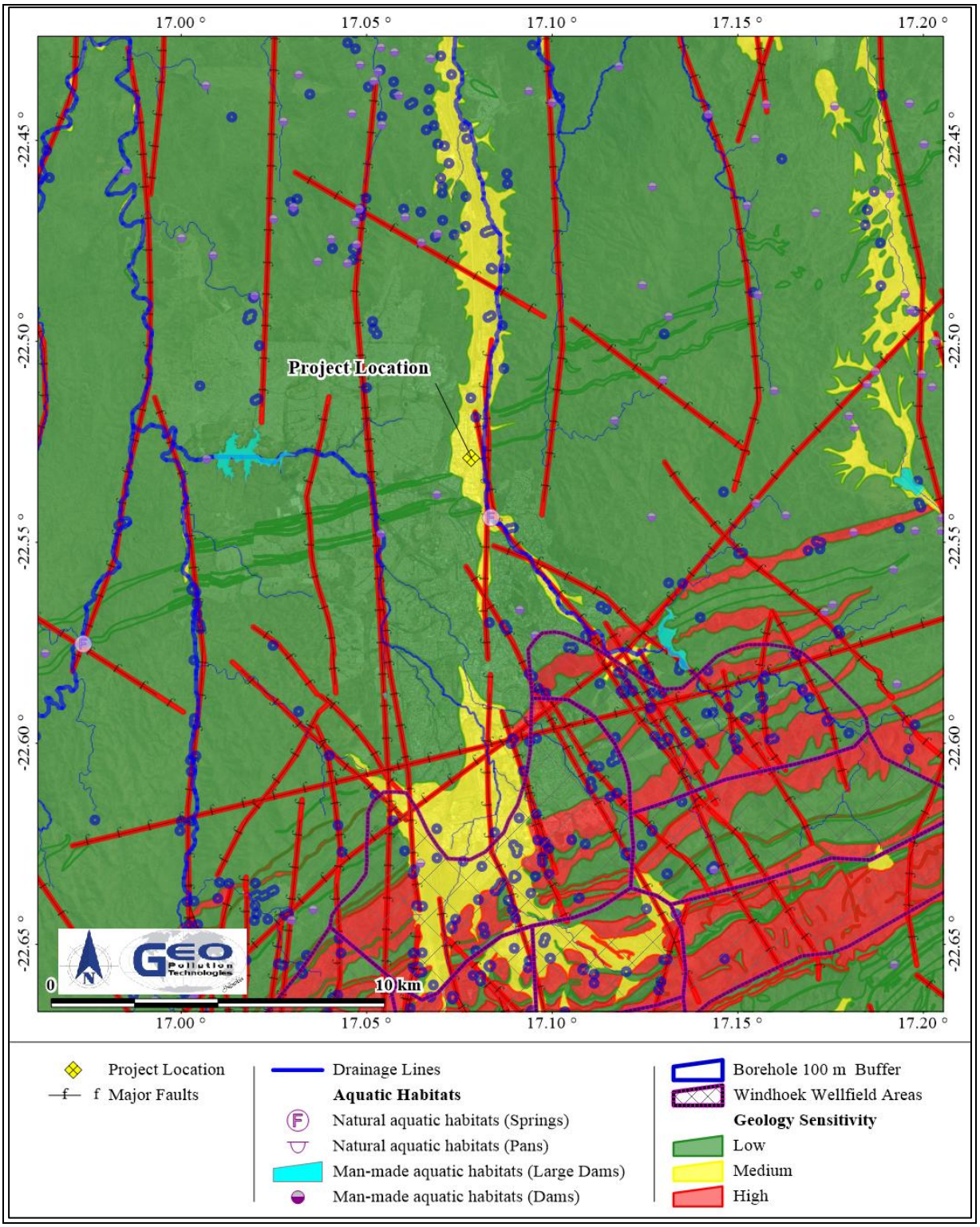


Figure 6-7 Geological sensitivity map

Implications and Impacts

A medium risk to groundwater is expected due to the medium geological sensitivity of the area. This is mainly due to the surface cover of highly permeable alluvium with less permeable mica schist underneath. However, chemicals and waste stored or treated on-site, have the potential to pollute the groundwater should a spill occur. Groundwater remains an important resource and would be a risk if fuel spills are not contained, cleaned and disposed of properly. LPG is less likely to cause an impact on groundwater, but firefighting chemicals might cause pollution of groundwater if applied on site.

6.6 PUBLIC WATER SUPPLY

Water consumption within Windhoek is carefully regulated through comprehensive water demand management strategies. Despite these efforts, water remains one of the city's most limited and valuable resources, posing a significant challenge to the city's long-term sustainable development. The ongoing population growth, driven by a steady influx of people into Windhoek, is expected to further increase the overall water demand.

Windhoek's water supply is sourced through a combination of methods, developed and implemented in sequence as the city's needs have evolved. The primary sources include:

- Boreholes located in and around the city play a significant role in meeting water demand.
- Reclaimed water is supplied via the New Goreangab Water Reclamation Plant.
- The NamWater Scheme facilitates the transfer of water from several major dams, namely the Von Bach Dam, Swakoppoort Dam, Omatako Dam and the Karst Area.

Recently, the city has initiated a project on managed recharge (previously referenced as artificial recharge) of the Windhoek aquifer. This programme is being expanded through the installation of additional recharge boreholes and the development of deeper abstraction boreholes, with depths ranging from 400 to 500 m. These efforts underscore the critical importance of the aquifer to Windhoek's water security (Murray *et al*., 2018). Boreholes represent the second most significant water resource for the city. The sustainable use and management of the Windhoek aquifer are essential to ensure its long-term viability as a water supply source. The propose LPG depot is situated area where groundwater is not utilised for public water supply, although some industries further north abstract groundwater.

The project area is situated within the Swakoppoort Dam catchment area, which is of regional importance for the public water supply serving central Namibia. The Swakoppoort Dam forms one of the three dams that supply water to the central areas of Namibia.

Implications and Impacts

Groundwater is a source of potable water and as such the public water supply should be protected. The likelihood that the Municipal water supply boreholes are impacted by pollution from this facility is low.

6.7 FAUNA AND FLORA

The site is located within a developed industrial area which has previously been cleared of all natural vegetation. Located in the Acacia Savanna biome, no related vegetation is present on-site except for a large camel thorn (*Vachellia erioloba*) tree (Photo 6-5) and an unidentified tree planted on-site (Photo 6-6). The site is also classified under the Highland shrubland sub-biome which forms part of the floristic group of Highlands - 1,500 m. Vegetation related to biome and the floristic group may be present east of the site, as part of the Klein Windhoek riverine vegetation.

Namibia hosts 217 mammal species, of which approximately between 61 and 75 may occur in the broader Windhoek area. Around 5 to 6 species are considered endemic to the region. Large mammals are limited locally due to urban and industrial development. However, ecological corridors, such as rivers and open servitudes, may present additional fauna and avifaunal habitats. The Klein Windhoek River, approximately 330 m east of the project area can therefore host a variety of birds and small mammals. It is unlikely that especially small animals would enter the project area, but vermin and small rodents or birds might use structures for perching or nesting.

Photo 6-5 Camel thorn (*Vachellia erioloba*) tree

Photo 6-6 Unidentified tree

Implications and Impacts

The project area does not support any naturally occurring fauna and flora, except for one camel thorn tree. This absence is a direct result of the area's ongoing use for industrial activities and the initial clearance of vegetation during earlier development phases. As a consequence, the ecological impact of the project is minimal, and there is little to no disruption to local wildlife habitats or plant communities within the immediate vicinity of the facility.

The camel thorn tree is a protected species and should be protected if possible. However if it poses a threat to the safe operation of the facility, it may be removed.

6.8 DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

The site is situated within the Khomas Region and located in the Windhoek East Constituency. Windhoek, is the capital city of Namibia and has a population of 481,169. It services as a central hub for economic, political and social activity within the country. The Windhoek East Constituency has a population of 30,054 people. The constituency is characterised by a high standard of basic service provision, with nearly all households (99%) having reliable access to fresh running water, electricity and sanitation services. For demographic characteristics of the Windhoek East Constituency, the region and Namibia as a whole, see Table 6-4 (National Statistics Agency, 2023).

Table 6-4 Demographic characteristics of the Windhoek East Constituency, the Khomas Region (Namibia Statistics Agency, 2023)

	Windhoek East Constituency	Khomas Region	Namibia
Population (Males)	14,213	241,085	1,474,224
Population (Females)	15,841	253,520	1,548,177
Population (Total)	30,054	494,605	3,022,401
Unemployment (15+ years)	137.3	21.7%	33.8%
Literacy (15+ years)	6.6%*	95.8%	87.3%
Education at secondary level (15+ years)	98.4%	N/A	24.8%

* Calculated as per the economically active segment of the population

Implications and Impacts

The LPG depot will aid in ensuring employment is sustained after the decommissioning of the fuel depot and provide a reliable supply of gas to the city and country. Some skill development and training will also benefit employees during the operational phase.

7 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 projects and to identify additional issues which they feel should be addressed in the environmental assessment.

Public participation notices were advertised twice for two weeks in the national papers: Republikein and Namibian Sun on 12 and 19 January 2026. A site notice was placed at the on-site location. Interested and affected parties were identified and notified of the project. Notification letters were hand delivered to available neighbours as well as the Ministry of Mines and Energy. See Appendix A for proof of the public participation processes. Two IAP's were registered but no concerns regarding the project were raised during the public consultation phase.

8 ASSESSMENT AND MANAGEMENT OF IMPACTS

The purpose of this section is to assess and identify the most pertinent environmental impacts that are expected from the operational, construction (also upgrades, maintenance, etc. – see glossary for "construction") 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 8-1).

Ranking formulas are then calculated as follow:
Environmental Classification = A1 x A2 x (B1 + B2 + B3). The environmental classification of impacts is provided in Table 8-2.

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 8-1 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 8-2 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

8.1 RISK ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN

The EMP provides management options to ensure impacts of the facility is 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 operations of the facility. This section of the report can act as a stand-alone document. All personnel taking part in the construction and operations of the facility should be made aware of the contents in this section.

The objectives of the EMP are:

- to include all components of decommissioning, construction activities (upgrades, maintenance, etc.) 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 construction and operational personnel in applying such controls; and
- to ensure that appropriate environmental training is provided to responsible construction and operational personnel.

Various potential and definite impacts will emanate from the construction, operational 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 construction and operational phases are expected to mostly be of low to medium 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 noise pollution and traffic impacts.

8.1.1 Planning

During the planning phases for construction, operations and decommissioning of the facility, it is the responsibility of the 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:

- Notify the petroleum inspectors of the Ministry of Industries, Mines and Energy prior to decommissioning of the bulk fuel storage facility.
- Ensure that all necessary permits from the various ministries, local authorities and any other bodies that governs the construction (maintenance) and operations of the facility are in place and valid.
- 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 (HSE) Coordinator to implement the EMP and oversee occupational health and safety as well as general environmental related compliance at the site.
- Make provisions to have a community liaison officer on-site who will handle complaints and community input, and through whom, where reasonable, monitoring data can be requested. Communicate the contact details of the community liaison officer to interested and affected parties when the project is initiated.
- Have the following on-site to deal with all potential emergencies:
    - Emergency response plan and HSE manuals;
    - Adequate protection and indemnity insurance cover for incidents;
    - 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 reporting system to report on aspects of construction activities, operations and decommissioning as outlined in the EMP.
- Prepare and submit environmental monitoring reports as per the conditions of the ECC.
- Appoint a specialist environmental consultant to update the EIA and EMP and apply for renewal of the ECC prior to expiry.

8.1.2 Revenue Generation

The project will contribute to national and local revenue streams during the decommissioning construction and operational phases. During the construction phase, wages and salaries will be paid to both skilled and unskilled workers, creating short-term income opportunities. In the operational phase, the employment of skilled and professional staff will, with their wages and salaries, contribute to increased household spending power in the local economy. The retailing of LPG will generate revenue through taxes and levies paid to the national treasury while also contributing to the local economy in term of increase spending power of employees as well as the sourcing of goods and services.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Contribution to local economy	2	1	2	2	2	12	2	Definite
Daily Operations	Contribution to local economy	3	2	3	2	2	42	4	Definite
Indirect Impacts	Increase in revenue generated	3	1	3	2	2	21	3	Definite

Desired Outcome: Contribution to national treasury and remuneration in accordance with Namibian law.

Actions

Enhancement:

- The Proponent must employ or contract local Namibians where possible.
- Payment of taxes, levies, salaries, etc. in accordance with Namibian law.
- Sourcing of local goods and services as far as is practically possible.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Bi-annual summary report based on employee records.

8.1.3 Skills, Technology and Development

During construction and operations of the facility, training is provided to a portion of the workforce to be able to perform their duties according to the required standards. Skills are transferred to an unskilled workforce for general tasks. The development of people and technology is key to the economic development of the town, region and nationally.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Technological development and transfer of skills	2	1	2	3	1	12	2	Probable
Daily Operations	Technological development and transfer of skills	3	1	3	2	2	21	3	Definite
Indirect Impacts	Economic development	3	1	3	2	2	21	3	Definite

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

Actions

Enhancement:

- If the skills exist locally, contractors and employees 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 the parameters and requirements for references upon employment.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A record should be kept of the 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.

8.1.4 Demographic Profile and Community Health

The facility relies on labour for construction and operations. The scale of the project is limited, and it is not foreseen that it has or will in future create a change in the demographic profile of the local community. Exposure to factors such as communicable diseases like HIV/AIDS as well as alcoholism / drug abuse, is often associated with the trucking industry (i.e. LPG deliveries). Leaks may present risks to members of the public, especially in the event of a gas leak.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Social ills related to increased spending power of employees of contractors	2	-2	2	2	2	-24	-3	Probable
Construction	Increased economic resilience and improved livelihoods of employees of contractors	3	2	3	2	2	28	3	Definite
Daily Operations	Social ills related to unemployment and cross country transport	2	-1	3	2	2	-14	-2	Probable
Daily Operations	Increased economic resilience and improved livelihoods	2	2	3	2	2	28	3	Definite
Indirect Impacts	The spread of diseases	3	-1	3	2	2	-21	-3	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.
- Adhere to all municipal by-laws relating to environmental health, which includes, but is not limited to, sand and grease traps for the various facilities and sanitation requirements.

Mitigation:

- Educational programmes for employees on HIV/AIDs and general upliftment of employees' social status.
- Appointment of reputable contractors.

Responsible Body:

- Proponent
- Contractors

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.

8.1.5 Traffic

The presence of the facility will result in an increase in traffic flow in the area, particularly associated with customer vehicles and the periodic delivery of LPG by road tankers. This may increase the risk of traffic incidents, especially during offloading activities. During the decommissioning and construction phase, temporary traffic impacts may also occur as a result of heavy vehicles accessing the site for the delivery and removal of construction materials and equipment. These impacts will be managed through appropriate traffic control measures and coordination with the relevant authorities to ensure safe access to and from the site.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Decommissioning / Construction	Delivery and removal of equipment and building supplies	1	-1	2	2	2	-6	-1	Definite
Daily Operations	Increase traffic, road wear and tear and accidents	2	-2	3	2	3	-32	-3	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.
- Schedule LPG deliveries and construction vehicle movements outside peak traffic hours where possible.
- Tanker trucks collecting and delivering LPG should not be allowed to obstruct any traffic.

Mitigation:

- If any traffic impacts are expected, traffic management should be performed.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

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

8.1.6 Health, Safety and Security

Activities associated with the decommissioning, construction and operational phases rely on human labour and, therefore, will expose them to health and safety risks. During decommissioning and construction risks may include those linked to earthworks, infrastructure removal, and development, as well as the presence of moving vehicles and machinery. In the operational phase, the handling of LPG can rapidly result in asphyxiation when inhaled. Skin or eye contact with LPG leaking or escaping from high-pressure vessels can result in frostbite or irritation. Lifting of heavy cylinders or equipment can result in injuries. Access to the site by unauthorised persons with the intent of arson, theft or sabotage of product or equipment must be prevented.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Decommissioning / Construction	Physical injuries, exposure to chemicals and criminal activities	1	-2	2	2	1	-10	-2	Probable
Daily Operations	Physical injuries, exposure to chemicals and criminal activities	2	-2	3	2	2	-28	-3	Probable

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

Actions

Prevention:

- 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's and signage requirements (personal protective equipment (PPE), flammable etc.).
- Manuals and training regarding the correct handling of LPG should be in place and updated as new or updated MSDS's become available. Ensure that all personnel receive adequate training on the operation of equipment/handling of hazardous substances.
- Ensure that worker exposure to LPG does not exceed the NIOSH Recommended Exposure Limit (REL) and OSHA Permissible Exposure Limit (PEL) of 1,000 ppm (1,800 mg/m^3) as an 8-hour time-weighted average (TWA).
- Develop emergency response plans for all possible health, safety and security impacts and appoint responsible personnel in key positions to activate and oversee such plans when required.
- 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.
- All health and safety standards specified in the Labour Act should be complied with.
- Clearly label dangerous and restricted areas as well as dangerous equipment and products, especially during the construction phase.
- Provide all employees with the required and adequate PPE.
- Implementation of a maintenance register for all equipment and gas / hazardous substance storage areas.
- Security procedures and proper security measures must be in place to protect workers and clients.
- Equipment on-site must be locked away or placed in a way that does not encourage criminal activities (e.g. theft).
- Conduct regular health checks and medical surveillance of staff exposed to hazardous substances, in line with occupational health guidelines.

Mitigation:

- For all emergency situations, the appropriate emergency response plan must be implemented as soon as possible in order to minimize the magnitude of impacts or prevent such impacts from developing into more severe impacts.
- For security incidents, ensure proper reporting, investigation and follow-up actions to strengthen future prevention measures.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

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

8.1.7 Fire

Decommissioning, construction and operational activities may increase the risk of fire hazards. During the decommissioning of the fuel depot, unleaded petrol can act as a static accumulator and may ignite if handled incorrectly. During operational activities LPG will be extremely flammable, and a fire or boiling liquid expanding vapour explosion (BLEVE) risk exists. Precautions must be put in place to prevent their ignition and associate fire risks and subsequent safety risks which may arise.

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	Improbable
Daily Operations	Fire and explosion risk	2	-2	3	2	2	-28	-3	Probable

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

Actions:

Prevention:

- A holistic fire protection and prevention plan must be developed for the site, and it should specifically take into account flammable products stored on-site. This plan must include an emergency response plan, firefighting plan and a spill recovery plan and should have dedicated assigned personnel to oversee their development and implementation.
- Storage and handling of LPG and other gases must be according to SANS 10087.
- All LPG storage and handling facilities in Namibia must comply with strict safety distances and fire precautions and control as prescribed by API Standards and/or SANS. SANS is adopted by the Ministry of Mines and Energy as the national standard.
- Firefighting equipment must be maintained and regularly serviced.
- All pressure release valves should regularly be inspected and serviced.
- Regular personnel training (firefighting, fire prevention and responsible housekeeping practices).
- Ensure adequate water supply is available on-site for firefighting purposes.
- Conduct fire drills regularly to test response readiness.
- Ensure all chemicals are stored strictly according to MSDS and SANS instructions. This includes segregation of incompatible products.
- Maintain regular site, mechanical and electrical inspections and perform regular maintenance.

Mitigation:

- For any fire-related emergency, the appropriate emergency response plan must be implemented as soon as possible in order to minimise the magnitude of impacts or prevent such impacts from developing into more severe impacts.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

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

8.1.8 Air Quality

LPG vapours should normally not be released into the atmosphere. LPG can have serious health effects and can lead to rapid asphyxiation. Construction and refurbishment activities may cause dust where soil surfaces are exposed.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Exposure to dust construction activities and trucks accessing the site	1	-2	2	2	2	-12	-2	Probable
Daily Operations	Exposure to LPG vapours during pressure releases or leaks	2	-2	3	2	2	-28	-3	Probable

Desired Outcome: To prevent health impacts related to reduced air quality.

Actions

Mitigation:

- Employees should be informed about the dangers of LPG vapours.
- All filling of cylinders should take place in a well ventilated area.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

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

8.1.9 Noise

Noise pollution may be generated due to heavy - and light motor vehicles accessing the site for the decommissioning, construction purposes and to offload LPG or refill cylinders during operations. Construction and refurbishment activities may result in a temporary increase in noise levels.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Decommissioning / Construction	Excessive noise generated from decommissioning / construction activities – nuisance and hearing loss	2	-1	2	2	1	-10	-2	Probable
Daily Operations	Noise generated from the operational activities – nuisance and hearing loss	2	-1	3	2	2	-14	-2	Probable

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

Actions

Prevention:

- Follow the Labour Act and Municipal Council of Windhoek: Noise Control Regulations - General Notice No. 77 of 2006 to prevent hearing impairment and a nuisance at nearby receptors.
- All machinery must be regularly serviced to ensure minimal noise production.
- Restrict construction activities that generate excessive noise to daytime working hours.

Mitigation:

- Hearing protectors as standard PPE for workers in situations with elevated noise levels.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Labour Act Health and Safety Regulations and the Municipal Council of Windhoek: Noise Control Regulations (Council Resolution 215/09/006).
- Maintain a complaints register.
- Bi-annual report on complaints and actions taken to address complaints and prevent future occurrences.

8.1.10 Waste Production

Waste will be produced during the decommissioning, construction and operational phases of the facility. This will include building rubble, hazardous waste associated with the handling of hydrocarbon products as well as maintenance waste such as building rubble and discarded equipment contaminated by hydrocarbons. Contaminated soil and water are also considered as hazardous waste. Waste presents a contamination risk and, if 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
Decommissioning / 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	3	2	2	-14	-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 reused/recycled must be kept separate.
- Ensure adequate waste storage facilities are available.
- Train employees and contractors in proper waste segregation and handling procedures.
- Establish agreements with licensed waste contractors for collection and safe disposal.
- Ensure waste cannot be blown away by the wind.
- Prevent scavenging (human and non-human) of stored waste.

Mitigation:

- Waste should be disposed of regularly and at appropriately classified disposal facilities, which include hazardous material (empty chemical containers, contaminated rugs, paper, water and soil).
- Contaminated soil from spills during the decommissioning and construction phase should be excavated immediately and disposed of at an approved hazardous waste facility.
- See the MSDS available from suppliers for disposal of contaminated products and empty containers.
- Liaise with the town council regarding waste and the handling of hazardous waste.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A register of hazardous waste disposal should be kept. This should include the type of waste, volume, as well as disposal method/facility.
- Any complaints received regarding waste should be recorded with notes on action taken.
- All information and reporting are to be included in a bi-annual report.

8.1.11 Ecosystem and Biodiversity Impact

The site has previously been developed and is mostly devoid of vegetation. The nature of the operational activities is such that the probability of creating a habitat for flora and fauna to establish is low. Ecosystem or biodiversity impacts are mostly associated with pollution of the environment.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Decommissioning / Construction	Impact on fauna and flora. Loss of biodiversity	1	-1	2	2	2	-6	-1	Definite
Daily Operations	Impact on fauna and flora - pollution	2	-1	3	2	2	-14	-2	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.

Mitigation:

- Contain construction material and activities on-site.
- Report any extraordinary animal sightings to the MEFT.
- Mitigation measures related to waste handling and the prevention of groundwater, surface water and soil contamination should limit ecosystem and biodiversity impacts.
- Prevent scavenging of waste by fauna.
- The establishment of habitats and nesting sites at the facility should be avoided where possible.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any ecologically significant events or sightings to be included in a bi-annual report.

8.1.12 Groundwater, Surface Water and Soil Contamination

Leakages from vehicles and accidental fuel, oil or hydraulic fluid spills can result in groundwater, surface water and soil contamination in the area. Bulk fuel storage tanks and pipelines may contain fuel residues during decommissioning and this should be prevented from spilling. The change from petrol and diesel storage on site to LPG storage should reduce the risk of soil and groundwater pollution. Firefighting chemicals used during training and firefighting drills and actual event may contaminate soil and groundwater. Firefighting chemicals must be carefully selected to pose no to minimum risks to the environment. The usage of PFAS (per- and polyfluoroalkyl substances) -containing foams should be avoided.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Decommissioning / Construction	Contamination from hazardous material spillages and hydrocarbon leakages	2	-1	2	2	1	-10	-2	Probable
Daily Operations	Contamination from hazardous material spillages	2	-1	3	2	1	-12	-2	Improbable

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

Actions

Prevention:

- All construction and or maintenance machines should be maintained to be in a good working condition during operation.
- Employ drip trays and spill kits during construction when on-site servicing/repairs of equipment are needed.
- 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 regularly (gas handling, spill detection, and spill control).
- Usage of PFAS (per- and polyfluoroalkyl substances) -containing foams should be avoided.

Mitigation:

- Where needed hydrocarbon polluted soil should be excavated and removed or in-situ remediation applied where needed.
- Spill clean-up means must be readily available on-site as per the relevant MSDS, and all spills must be cleaned up immediately.

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, and comparison of pre-exposure baseline data (previous pollution conditions survey results) with post-remediation data (e.g. soil / groundwater hydrocarbon concentrations).

8.1.13 Visual Impact

This is an impact that not only affects the aesthetic appearance but also the integrity of the facility. The general upkeep and maintenance of the facility will not only reduce any negative visual impacts but also ensure the longevity of the structures and buildings.

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	3	2	2	7	1	Definite

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

Actions

Mitigation:

- Regular waste disposal, good housekeeping and routine maintenance on infrastructure will ensure that the longevity of structures is maximised, and a low visual impact is maintained.
- Minimum lighting necessary for operations to be used at night. The installation of auto-dimming lights when no movement is detected is desirable.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

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

8.1.14 Cumulative Impact

Possible cumulative impacts will arise during the decommissioning, construction and operational phases of the facility. Construction activities may temporarily increase traffic and noise in the immediate area due to the movement of heavy vehicles and machinery. During the operational phase, cumulative impacts will include increased traffic and associated noise linked to LPG deliveries and customer vehicles accessing the site.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Decommissioning / Construction	The build-up of minor impacts to become more significant	2	-2	2	2	2	-24	-3	Definite
Daily Operations	The build-up of minor impacts to become more significant	2	-1	3	2	2	-14	-2	Probable

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 bi-annual and annual reports for any new or recurring impacts or problems would aid in identifying cumulative impacts and help in planning if the existing mitigations are insufficient.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Review bi-annual reports to determine the overall impact of the operational phase.

8.2 DECOMMISSIONING AND REHABILITATION

Decommissioning is anticipated during the validity period of the ECC, and it is being evaluated as part of the environmental assessment process. Rehabilitation of the affected area may be required to restore the site to an acceptable condition.

The decommissioning process will involve the complete removal of all infrastructure, including buildings and underground installations. Any pollution identified on-site must be addressed through appropriate remediation actions. This includes surveying soil conditions to identify potential hydrocarbon contamination, followed by the implementation of suitable remediation measures as required.

During the decommissioning phase, anticipated impacts include elevated noise levels and the generation of waste as structures are dismantled. All noise generated must comply with the Labour Act Health and Safety Regulations and adhere to the City of Windhoek's prescribed noise limits. Furthermore, waste generated throughout the process must be securely contained and transported to an appropriately classified and approved waste disposal facility; under no circumstances should waste be dumped in the surrounding environment.

8.3 ENVIRONMENTAL MANAGEMENT SYSTEM

The Proponent could implement an EMS for their operations. An EMS is an internationally recognised 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;
- Periodic (internal and external) audits and reviews of environmental performance and the effectiveness of the EMS; and
- The EMP.

9 CONCLUSIONS

The transition from a bulk fuel storage facility to a bulk LPG storage facility, including associated cylinder filling operations, is anticipated to bring benefits to the city and the surrounding businesses. The availability of a reliable and convenient supply of LPG will enhance local access to LPG that has a large variety of uses. Additionally, the facility will contribute positively to the local economy by creating employment opportunities and fostering skills transfer and training, thereby supporting the development of the local workforce.

Ongoing upgrades and refurbishment of the facility will be essential to maintain compliance with legislative requirements. These measures will also help secure a constant and reliable supply of LPG for the community and local businesses. Potential negative impacts associated with the operations can be effectively mitigated by adhering to established standards and regulations. All LPG storage and handling activities must comply with the relevant SANS standards. Noise pollution should be strictly managed to ensure that it remains within the limits prescribed by the City of Windhoek, as well as the Health and Safety Regulations outlined in the Labour Act (2007), to prevent hearing loss and avoid causing a nuisance.

The EMP (Section 8) 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 environment management system (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 8 which includes an EMP for this project. It should be noted that the aim of the assessment process 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.

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Appendix A: Proof of Public Consultation

Notified and Registered Parties

Organisation	**Contact Person**
Notified Authorities	
Ministry of Industry, Mines and Energy	Office of the Executive Director
Notified Parties	
Vivo Energy	Fanuel Ikolo
Roland Hoppe-Speer	Autohaus MAN Trucks & Bus
Una Dewaldt	M&Z Car Care
M. Goanub	Total Energies
H. Nambahu	Namib Mills
Lazarus Amutse	Puma Energy
Registered Parties	
Simeon Namweya	EIA Tracking and Monitoring in Namibia (EIA Tracker)
Hendrik Venter	METJE + ZIEGLER LIMITED
Cameron Kotze	Namib Mills

Public Participation Notification: Environmental Assessment

For the decommissioning of a bulk fuel storage facility and the construction of a bulk storage facility for liquefied petroleum gas, on erf 7997, Northern Industrial area, Windhoek

Name & Surname	Organisation/Address	Tel / Mobile	Email	Signature
Fanuel Tkololo	VIVO ENERGY			
Roland Hoppe-Speer	Autohaus Truck Bus			
Ursi DE WALDT	HAZ COR CORE			
M. GOAMUB	TOTALENERGIES			
H. Nambahu	Namib Mills			
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To: **The Executive Director**
Ministry of Industries, Mines and Energy
Private Bag 13297
Windhoek

Ministry of Industries, Mines and Energy
Office of the Executive Director
28 JAN 2026
Received
Private Bag 13297
Windhoek
Official

COPY

28 January 2026

Dear Sir/Madam

Re: **Environmental Scoping Assessment and Environmental Management Plan for the Decommissioning of a Bulk Fuel Storage Facility and the Construction of a Bulk Storage Facility for Liquefied Petroleum Gas, Windhoek**

Geo Pollution Technologies (Pty) Ltd was appointed by Vivo Energy Namibia (Pty) Ltd (the Proponent) to undertake an environmental assessment for the decommissioning of a bulk fuel storage facility and the construction of a bulk storage facility for liquefied petroleum gas, on erf 7997, Northern Industrial area, Windhoek (Figure 1). The Proponent intends to remove all infrastructure on erf 7997 associated with the bulk fuel storage facility and construct a new facility for the bulk handling and storage of liquefied petroleum gas (LPG).

Geo Pollution Technologies (Pty) Ltd (GPT) was appointed by the Proponent to undertake an environmental assessment for the construction and operation of the facility. The environmental assessment is required in order to apply for an environmental clearance certificate (ECC) for the proposed development. The ECC application will be made in terms of the Environmental Management Act, Act No. 7 of 2007 (EMA). A scoping environmental impact assessment (EIA) report and an environmental management plan (EMP) are proposed to be submitted to the Ministry of Environment, Forestry and Tourism's Department of Environmental Affairs (DEA) in support of an application for an ECC.

Project Environmental Scoping Assessment and Environmental Management Plan for the Decommissioning of a Bulk Fuel Storage Facility and the Construction of a Bulk Storage Facility for Liquefied Petroleum Gas, Windhoek

Proponent: Vivo Energy Namibia (Pty) Ltd

Environmental Assessment Practitioner: Geo Pollution Technologies (Pty) Ltd

All existing infrastructure will be decommissioned and removed. This includes the previously used aboveground storage tanks, offices, workshops, store rooms, oil storage, a laboratory and the railway siding. Two LPG storage tanks will be installed (initially one 114 m^3 storage tank, with another similar tank to be installed in future), a LPG loading and unloading gantry will be constructed as well as a LPG cylinder storage and filling area. To allow for sufficient backup firewater availability, firefighting infrastructure will be installed and one firewater storage tank and one water pump house will be constructed on the adjacent Vivo Energy Bulk Fuel Storage facility on erf 3523.

Normal operations associated with a bulk LPG storage facility and filling operations will continue on the new developed site. This mainly involves the receipt of LPG from road tankers, its storage in bulk tanks and dispensing of the LPG into smaller cylinders supplied to customers. Daily activities involves filling of cylinders, gas sales and cleaning of the site.

Firefighting and safety equipment will be installed throughout the facility in accordance with South African National Standards (SANS) and Namibian legislative requirements to ensure safe operations.

Press Notice: The Namibian Sun 12 and 19 January 2026

NEWS IN SHORT

GIPF's pension-backed home loan scheme kicks off

The Government Institutions Pension Fund (GIPF)–backed Home Loan Scheme (PBHLS) will become effective today.
According to GIPF spokesperson Edwin Tjiramba, the scheme will allow active members to use a portion of their pension savings as collateral to purchase erven, buy or improve existing homes, purchase new houses, or construct homes in both urban and rural areas.
Tjiramba stressed that the facility will not be granted for the purpose of consolidating non–home loan debt. However, the scheme will allow members to transfer existing home loans financed by other financial institutions.
The PBHLS is currently available only to active members and members on disability. Active members may access up to 33.33% of their GIPF pension savings as pension credit, at interest rates set at the prevailing repo rate plus 2.5%. With the current repo rate at 6.5%, this brings the interest rate on the loans to 9%.
The scheme will be administered by First Capital Treasury Solutions (FCTS) and Kuleni Financial Services (Pty) Ltd.
Tjiramba urged members not to visit GIPF offices to apply for the loans. - AUGETTO GRAIG

GIPF spokesperson Edwin Tjiramba. PHOTO: GIPF

• NAMIBIA URGED TO TAKE SITUATION SERIOUSLY

Germany warns tourists of rising crime in Namibia

German travellers **are advised to avoid walking in remote areas.**

FRANCOISE STEYNBERG
WINDHOEK

Germany has issued an urgent travel warning against Namibia and several other countries, cautioning German tourists to be vigilant due to safety concerns and rising crime. Germany, Namibia's largest tourism source market, in 2026 follows closely in the footsteps of Canada, the United States of America (USA) and the United Kingdom (UK), which issued similar warnings towards the end of last year.

The Namibian tourism sector has expressed concern about mounting challenges facing an industry that has only recently regained its footing following the Covid-19 pandemic, according to the chief executive officer of the Hospitality Association of Namibia (HAN), Gitta Paetzold.

"It appears that numerous challenges lie ahead for Namibia's tourism industry: expensive airfares, rising prices, complaints about service delivery and infrastructure in national parks, and now the revision of travel warnings – the last routine step countries take once incidents involving tourists occur," Paetzold said last week Thursday. "But this affects the perception of a travel destination," she added.

These warnings have become an important consideration for travellers, particularly as security risks continue to rise in various countries. The situation is fluid, and travellers are encouraged to stay informed and take the necessary precautions while in the affected destinations.

WARNED: Germany's warning follows concerns over Namibia's security risks and rising crime. PHOTO: FILE

According to the Ministry of Environment, Forestry and Tourism's (MEFT) 2024 tourism statistics report, 111 164 German tourists visited Namibia, making Germany the largest overseas source market, spokesperson Vilho Hangula confirmed. Paetzold said HAN statistics show that the German-speaking market (Germany, Austria and Switzerland) accounts for between 36% and 40% of bed occupancy.

Windhoek a hotspot

Germany's warning follows concerns over Namibia's security risks and rising crime. German authorities believe Namibia's political situation is currently stable, but note an increase in crimes targeting tourists' belongings, particularly in the capital.

"In recent months there has been an increase in robberies, including violent attacks on travellers, often targeting tourists staying in remote areas and campsites. Windhoek has become a crime hotspot, with incidents peaking on Sundays and public holidays when fewer people are outside and moving around," German authorities warn.

Travellers have reported being followed from airports to accommodation establishments, where they are distracted and robbed.

"In addition, Namibia's more remote regions, such as isolated northern areas and rural tourist attractions, have seen an increase in violent crime and theft. There are also reports of fraud, with scammers targeting unsuspecting visitors through fraudulent schemes, particularly at popular tourist destinations."

Security measures

German travellers are advised to avoid walking in remote areas and leaving valuables unattended. Security measures should be a top priority, especially when travelling in isolated regions.

Canada has likewise warned against robberies, burglaries and carjackings, with most incidents involving visitors reported in and around Windhoek. The warning also points to an increase in financial fraud targeting tourists, including credit card cloning at some hotels and lodges, as well as theft and distraction tactics at ATMs.

Paetzold cautioned that the travel warnings should be taken seriously by Namibia.

"Ideally, institutions such as the authorities – MEFT and the Namibia Tourism Board (NTB) – should take a stance, because combating crime is a national responsibility, as are visa regulations and bilateral relations with other countries."

She said the private sector is working hard to market Namibia as a unique, safe and attractive destination.

"Hopefully MEFT will soon step in through the planned national spatial tourism development master plan to emphasise the need for an 'all-of-government' approach to create the right conditions and allow tourism potential to flourish," she said. francoise@nmh.com.na

Dausab returns to Unam as executive dean

STAFF REPORTER
WINDHOEK

Former justice minister Yvonne Dausab has returned to the University of Namibia (Unam) as executive dean for the faculty of law and economics, and management sciences.

Dausab previously served as deputy dean of the university's law faculty before leaving in 2015 to become chairperson of the Law Reform and Development Commission (LRDC).

In March 2020, she was appointed minister of justice, replacing the incarcerated Sacky Shanghala.

A trained lawyer, Dausab exited cabinet in March 2025 after not making the Swapo list of parliamentarians the previous year.

BACK: Yvonne Dausab. PHOTO: FILE

STAND-OFF OVER DELAYED SWEARING-IN OF GOBABIS COUNCILLORS

ELIZABETH KHEIBES
WINDHOEK

A stand-off has emerged over the swearing-in of councillors from the A Right to Shelter Foundation of Namibia (A-RTS-N) in Gobabis, with the association accusing the Ministry of Urban and Regional Development and the local authority of deliberately delaying the process and denying it representation on the town council.

A-RTS-N secretary Wynand Lukas said the association complied with all legal and administrative requirements following the 26 November 2025 local authority elections, in which it secured three seats. To date, only one councillor has been sworn in, while two remain excluded as the council prepares to commence induction on 18 January 2026.

Lukas said the association initially requested a postponement of the swearing-in in December to resolve internal organisational matters, but stressed that this did not waive its constitutional or statutory rights.

"Despite all issues being resolved and our councillors ready to assume office, there appears to be a coordinated effort to prevent the swearing-in," he said, describing the situation as "bullying" against the association.

LOGGERHEADS: A-RTS-N secretary Wynand Lukas. PHOTO: CONTRIBUTED

Minister's role disputed

The Gobabis Municipality, through chief executive officer Sophia Eises, informed A-RTS-N that the matter had been referred to Minister James Sankwasa for "further review and appropriate action," citing ministerial authority over councillor swearing-ins.

The association strongly rejected this. In a formal response copied to the ECN and Gobabis magistrate, A-RTS-N said the Local Authorities Act, 23 of 1992, does not give the minister discretion to delay the swearing-in of duly elected councillors once results are final.

The association cites Section 9 of the Act, which provides that councillors hold office from the date of election, subject to taking the oath. It argues any delay infringes on voters' constitutional rights under Article 17, which guarantees participation in governance.

"This denial prevents us from participating in council business and undermines the democratic choices of residents," Lukas said.

Withdrawal of sworn-in councillor

The situation is further complicated by the suspension and withdrawal of councillor Dina Fillemon, already sworn in. A-RTS-N suspended her from duty on 7 January pending disciplinary proceedings and formally withdrew her as its representative under Section 13(1)(g), intending to nominate another member.

The ECN has cautioned that candidate lists are final once polling occurs. In a letter dated 12 December 2025, Acting Chief Electoral Officer Advocate Heidi Jacobs noted amendments are only permitted before election day, and the ECN's mandate ends with result announcements.

Despite this, A-RTS-N maintains that swearing-in falls under the municipality and magistrate, not the minister. Lukas said the councillors will present themselves when council business resumes and await the oath.

NEWS IN SHORT

Lightning kills one, hospitalises another

Two separate lightning strike incidents were reported on Friday at Kanyikama village in the Kavango West region. According to regional commander, police Commissioner Julia Sakuwa-Neo, the first incident occurred at about 15:00 when Immanuel Muyongo (21) was struck by lightning while herding cattle with his cousin, killing him instantly.
The second incident happened around 16:00 in a different area of the same village, where a 26-year-old woman was struck by lightning while weeding in a maize field. She sustained severe burns and was admitted to Nankudu Hospital in a stable condition. - PHILLIPUS JOSEF

Walvis Bay coastal waters a dolphin hotspot

The coastal waters off Walvis Bay once again proved to be a hotspot for marine mammals in 2025. According to the Marine Eco Foundation Namibia, a total of around 3 720 dolphin sightings were recorded over the course of the year – a figure that highlights both the diversity of species and the effectiveness of ongoing research and conservation efforts. The largest share, with 2 157 sightings, were the rare Heaviside's dolphins. In addition, there were 1 130 sightings of bottlenose dolphins and 433 sightings of black dolphins. The numbers are based on systematic surveys as well as reports from researchers, volunteers and members of the public who shared their observations on the water.
- CLAUDIA REITER

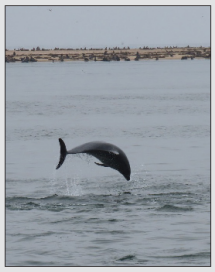


PHOTO: MARINE ECO FOUNDATION NAMIBIA

Overstay amnesty extended to 20 January

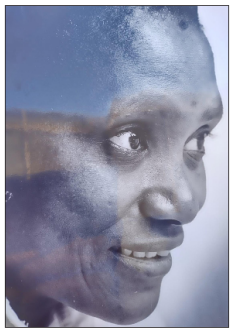
The home affairs and immigration ministry has extended its amnesty offer until 20 January for foreigners who have overstayed their permitted time in Namibia. The offer was initially valid from 15 December to 16 January. The ministry is urging overstayers to voluntarily approach the nearest immigration office or border post to avoid prosecution, arrest and fines. No further extension of the amnesty will be granted, executive director Nghidinua Daniel said. Visitors are responsible for their own travel costs and must have valid travel or identity documents. - AUGETTO GRAIG

• MONIKA SHEYA'S LONG ROAD THROUGH EXILE

From the frontline to detention

She crossed into exile aged **21 believing in the ideals of liberation.**

ELIZABETH KHEIBES
WINDHOEK



EXILED: Monika Sheya. PHOTO CONTRIBUTED

Monika Ndina Sheya was 21 when she crossed into exile in 1974, slipping through a hole dug beneath the border fence at Ondjiva and into Angola with a small group of nurses, students and young men.

Like many of her generation, she believed she was answering a call to liberation. What followed, she says, was a descent from discipline and sacrifice into starvation, fear and silence – ending on a river island in Zambia where people were shot, starved and erased.

Her journey through exile took her across multiple camps – Karabo, Shatotwa, Senanga and finally Mboroma – tracing not only the brutality she says she witnessed, but also her own role as a nurse, trainer and frontline combatant before becoming a detainee.

Crossing into exile

After arriving in Angola, Sheya recalls being housed briefly in a school hall before groups were moved eastwards, first towards Zaire and then Zambia. Thousands travelled on foot for days, including pregnant women and children.

"We were thirsty. We were tired," she recalls. "We sold our clothes for boiled maize so we could eat."

From the Angola–Zaire border, the group crossed desert terrain. At the Zaire–Zambia border, the railway line ended. From there, they walked about 100 kilometres through bush and open land before crossing rivers by canoe.

"You could hear the hippos breathing at night," she says.

Once inside Zambia, they were taken to Karabo, a Swapo camp. There, recruits were ordered to surrender all their money, supposedly to be exchanged into local currency. Soon after, they were moved again – this time to Shatotwa.

Training in hardship

Shatotwa, she says, was a remote forest camp with little infrastructure.

"There was nothing," she recalls. "Just a forest, one green tent for the leaders and bags of maize meal."

Military training began almost immediately. Recruits marched long distances, dismantled and reassembled weapons, and endured strict discipline. Food was scarce.

"We were fed maize meal in water. No salt. No sugar," she says.

Despite the conditions, Sheya advanced quickly. After three months, she became a trainer, instructing new arrivals in weapons maintenance. She also worked in the camp clinic, dispensing medication supplied from abroad.

She was later selected for specialised training in Kongwa, Tanzania, where conditions improved.

"It was hard work, but we were well fed," she says.

At the frontline

After about a year, Sheya was sent back to Zambia. One day, she was abruptly ordered to pack her military and first-aid bags.

"I didn't ask where I was going," she says. "You don't ask questions."

She and another woman were transported by armoured truck to a frontline position near the river at Katima Mulilo. Living in a small camouflage tent without fires or light, they survived on rations.

"I was one of the first two women at the Katima Mulilo frontline," she says.

She remained there for nearly nine months and took part in three engagements against South African forces, tending to wounded soldiers under fire. One young man, she recalls, shot himself. She handled his body until it was removed.

At night, danger came from all sides.

"You could hear breathing outside your ribs while you slept," she says.

Withdrawal and disarmament

When Swapo's founding president visited the frontline by helicopter, Sheya asked why women had to be deployed there.

"If I die here, there are children who will never be born," she says.

She says the question went unanswered.

Soon after, ammunition ran out. Fighters survived by hiding and retreating through the bush. The unit was eventually withdrawn to Senanga, an island base plagued by mosquitoes and malaria. Medication was scarce.

Later, they were transferred to a central base near Shatotwa and disarmed.

"All the guns were taken away," she says. "We became nobody."

Detention at Mboroma

While fetching medication one day, Sheya narrowly escaped a South African bombing. That night, the camp was evacuated. She was told they were going to Lusaka.

They were not.

The journey ended at Mboroma, an isolated island camp guarded by Zambian soldiers.

"I later learned it had been used as a detention camp," she says. "A concentration camp."

By the time she arrived, she estimates nearly 1 850 people were detained there.

Killings and starvation

On 5 August 1976, gunfire erupted. She remembers hiding near the latrine and watching as men were executed.

"All of them were shot in the head," she says.

At least 15 people were seriously injured. She was ordered to help collect the wounded. Later, she says, a Zambian commander told detainees the killings had been ordered.

Starvation was already widespread.

"We were deliberately starved," she says. "People dropped dead in the queue."

Smuggling the truth

While transporting bodies under guard, a young soldier gave her two postage stamps. She used them to smuggle a letter to the outside world, hiding it in her sanitary pads.

"I know it reached the BBC," she says.

When camp authorities demanded to know who had leaked the information, Sheya admitted responsibility.

"I was beaten almost to death," she says.

Eventually, detainees were given a choice: return to Swapo structures or leave as refugees under the United Nations. About 200, including Sheya, chose refugee status.

A call for truth

Nearly 50 years on, Sheya says she is not seeking revenge, only truth and recognition.

"What happened to the bodies I carried?" she asks.

"We were comrades," she says. "We were not spies. And we deserve the truth."

PARENTS ALARMED BY CONDITIONS AT KHORIXAS SCHOOL HOSTEL

AURELIA AFRIKANER
WINDHOEK

Parents of children enrolled at a Khorixas hostel have voiced deep disappointment and concern over deteriorating conditions at the Cornelius Goreseb High School hostel.

The parents told Namibian Sun the situation has remained unresolved for more than a year despite repeated complaints.

According to claims from sources, the second hostel block designated for female learners is allegedly occupied by teachers and hostel workers as well as individuals who are not employed by the education ministry.

According to a source who requested anonymity, some of these occupants are alleged to live in the hostel free of charge, further limiting space intended for learners.

Parents expressed frustration that they are often told the hostel is full, while accommodation designated for girls is being used for other purposes.

The hostel block housing the girls is also in poor condition, the source said.

Safety concerns were also raised, with parents alarmed that a male teacher living near the girls' block is alleged to bring friends onto the hostel premises.

"They always tell us the hostel is full, but it will obviously be full if workers occupy the space meant for the girls. This is not safe for our children," said a parent who requested anonymity.

Further concerns were raised after a voice note reportedly circulated in a local Khorixas group, noting the urgent need for repairs and describing the hostel as untidy, with broken windows and worn-out floors.

A mother who recently dropped off her daughter said there is a serious shortage of mattresses, while lockers are in such poor condition that should be replaced.

Ministry acknowledges problem

Responding to the concerns, the director of education in the Kunene region, Sofia Fredericks, told Namibian Sun her office is aware of the situation.

"Cornelius Goreseb hostel is not the only dilapidated hostel in the region," she said.

"There are several hostels in this condition, but we do have plans to renovate."

Fredericks added that three hostels in Outjo have already been renovated and that a broader renovation and development plan is in place, though limited resources mean the work cannot be done all at once.

Despite these assurances, parents say the conditions remain unacceptable and that the safety and dignity of learners should be prioritised without further delay.

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WEER

BINNELAND: Gedeeltelik bewolk en warm tot baie warm, maar baie warm in die Suide. Wydverspreide donderbuie en reën is waarskynlik oor die binneland, behalwe vir die verre Suidweste. Winderige weer word oor die westelike en suidelike dele verwag.

KUS: Gedeeltelik bewolk en matig tot warm met ligte reën waarskynlik op plekke.

GETYE BY WALVISBAAI: H: 10H:1 L: 17:01 H: 23:35

VOORUITSIGTE

WINDHOEK	18°	29°
RUNDU	20°	31°
OSHAKATI	20°	30°
GOBABIS	20°	31°
MARIENTAL	20°	38°
KEETMANSHOOP	32°	38°
WALVISBAAI	18°	23°
LUANDA	23°	28°
JOHANNESBURG	13°	26°
KAAPSTAD	15°	24°

Hommeltuie wemel

VAN BL. 1

Cilliers het gesê sy is besig om verklarings voor te berei om dit vandeesweek by die Namibiese polisie aan te meld.

Stokkiesdraai was een van die plase in die Suide wat die ergste onder die droogte deurgeloop het en Cilliers kon ook nie haar perde in die buiteland verkoop toe entstowwe teen perdesiekte nie beskikbaar was nie. Boonop voer sy 'n verbete stryd teen kanker.

In Julie en Augustus verlede jaar was boere van Helmeringhausen geteister deur hommeltuie wat snags oor hul plase sonder hul toestemming vlieg.

Elize Cilliers
PLAASEIENAAR

"My dogter Lindie wat ook boer, moet nou snags buite spandeer om te waak oor ons wild en perde, want jy weet nie waarom hulle daar vlieg en of hulle wild wil stroop of perde wil steel nie."

Hommeltuie vlieg steeds volgens Suide-boere sonder hul toestemming oor hul plase.
FOTO TER ILLUSTRASIE FACEBOOK/DRONE NAMIBIA AERIAL & PHOTO

Republikein het destyds oor die voorvalle berig en vir NCAA gevra of permitaansoeke vir die vlieg van hommeltuie oor die omgewing gedoen is. Ashipala het toe gesê slegs as die name van die aansoekers verskaf word, kan dit op die databasis gesoek word. *Republikein* het 'n naam van 'n vroulike Namibiese mynboukonsultant wat na bewering aansoek vir 'n hommeltuigpermit gedoen het, asook 'n mynbou-eksplorasiemaatskappy, aan die NCAA verskaf om in die databasis in te voer, maar het na herhaalde navrae geen terugvoer ontvang nie.

Ashipala het bevestig individue of entiteite wat hommeltuie binne die Namibiese lugruim bedryf, moet operasionele goedkeuring van NCAA verkry in ooreenstemming met nasionale lugvaartregulasies. Dit sluit spesifieke gebruiksvoorwaardes, goedgekeurde operasionele gebiede en veiligheidsvereistes in. Daar is verskeie maatskappye wat toestemming by NCAA het om grootskaalse lug- en hommeltuigopnames in Namibië te doen.

"Ongelukkig is daar tans geen toegewyde stelsel in plek om ongemagtigde hommeltuie wat in die Namibiese lugruim bedryf word, op te spoor, na te spoor en te identifiseer nie," het hy gesê.

Adelheid von Wielligh van die Gemeenskapspolisiëring Misdaadvoorkomingsforum het bevestig dat hommeltuie weer erg bedrywig is by die Swartrand. "Die hommeltuie hou net nie op nie en daar is geen terugvoer oor die inbreuk op privaatheid oor ons plase nie."

Elize Cilliers met haar geliefde perde. FOTO FACEBOOK/ELIZE CILLIERS

Die voorsitter van die Konkiep Farmers Watch (KFW) en boer in die Helmeringhausen-omgewing, Malcolm Campbell, het Vrydag gesê die hommeltuie vlieg nog steeds in hul omgewing.

'GEBIED VERGROOT DRASTIES'

"Dit het nou bietjie minder geraak by ons, maar hulle kom nog voor. Die area van voorkoms het nou net drasties vergroot en word hulle meer gereeld op die Swartrand na Gibeon se kant toe opgemerk, soos byvoorbeeld by Elize-hulle.

"Verder kom dit ook nou meer gereeld voor tot so ver as Rosh Pinah en Goageb, asook in die dieper Namib tot duskant die parkgrens."

Campbell sê die voorkoms van hommeltuie bly snags van omstreeks 21:30 tot 05:00.

"Dis groot hommeltuie met lang battery-ure en word verseker van ver af beheer, ver buite as die normale hommeltuie se 7 km-radius se reikafstand."

Hy vermoed iemand groter as normale individue sit hieragter: "Dié soort hommeltuie is nie wat elke Jan Rap en sy maat kan bekostig en vlieg nie.

"Dit is moeilik om te glo dat die regering glad nie bewus is hiervan nie. Iemand wat al so lank onverstoord voortgaan met die hommeltuie se vlieg oor so groot gebied en nie deur wetstoepassers al vasgetrap is nie, laat mens wonder. Ons regering weet al lankal van die hommeltuie via mediaberigte."

Campbell voeg by "ons privaatheid is beslis nie meer ons privaatheid nie, lankal nie meer nie" en vra: "Is dit dalk die nuwe toekoms hoe landbou in Namibië deur wie en wat dopgehou gaan word?"

MELD AAN BY NCAA

Om die NCAA te help om patrone te identifiseer en vir die nodige opvolgaksie en ondersoeke te doen, word versoek dat enige verslae soveel as moontlik van die volgende inligting insluit:

- Datum en tyd van die voorval;
- Presiese ligging;
- Tipe of voorkoms van die hommeltuig (grootte, kleur, klank, hoogte);
- Moontlike ligging van die operateur of enige individue wat die hommeltuig beheer.

- francoise@nmh.com.na

Bedrogsaak

VAN BL. 1

Die hof het verder aangehoor dat die polisie later vasgestel het dat N$80 000 van die beweerde bedrog in die bankrekening van Nakanduungile se driejarige kind betaal is. Gabriel het gesê die kind se ma het geweier om dit by die polisie aan te meld om die bron van die geld te verduidelik. Sy het aangedui dat sy dit slegs in die teenwoordigheid van haar prokureur, Petrus Smart Elago, wat ook vir Nakanduungile verteenwoordig, sou doen.

SKAKEL TUSSEN BEWEERDE BEDROG EN AANVAL

Volgens Gabriel het die beweerde bedrog ontstaan by Claudia, wat na bewering N$200 000 in Nakanduungile se mediese praktyk belê het. Sy het glo haar mediese dokumente aan Mateus voorgelê, wat dit in 'n siekte-eis verander het voordat sy dit by Sanlam ingedien het.

Dit was tydens die verspreiding van die geld, het Gabriel getuig, dat die polisie vasgestel het dat die geld wat in Nakanduungile se rekening betaal is, afkomstig was van die beweerde bedrog.

Die ondersoekbeampte het verder getuig dat Nakanduungile noue kontak met Mateus gehandhaaf het, met die twee wat na bewering na mekaar as 'n "brigade" verwys het.

Terwyl Gabriel 'n verklaring van Nakanduungile geneem het, het die dokter na bewering drie oproepe van Mateus ontvang, wat daarvan beskuldig word dat hy die aanval op Shiweda vanuit polisie-aanhoudingselle beplan het.

Mateus het Nakanduungile na bewering gewaarsku om nie inligting oor die voertuig wat tydens die aanval gebruik is, bekend te maak nie. Gabriel het aan die hof gesê die oproepe is ontvang terwyl Nakanduungile in die teenwoordigheid van polisiebeamptes was.

Dr. Fillemon (Fly) Nakanduungile by die Ondangwa-landdroshof.
FOTO TUYEIMO HAIDULA

PROKUREUR WAARSKU GLO

Die hof het ook gehoor dat kort ná die oproepe van Mateus, 'n prokureur gebaseer in die Noorde na bewering vir Nakanduungile gekontak het en hom aangeraai het om nie met ondersoekbeamptes saam te werk nie.

"Die prokureur het die aansoeker gebel en vir hom gesê: 'Moenie vir daardie dom Gabriel enigiets vertel nie. As daar enigiets is wat hulle wil hê, laat hulle jou arresteer sodat ons alles in die hof kan bespreek'," het Gabriel getuig.

Hy het getuig dat Johannes Nghilifavali (37), die vierde beskuldigde in die saak, in Windhoek in hegtenis geneem is terwyl hy na bewering onder sy meisie se bed weggekruip het. Toe die meisie se huis daarna deursoek is, is 'n polisiedossier glo ontdek wat die beskuldigde se verklaring, vals geld, gebruikte patrone en twee skerp koeëls bevat het.

SLAGOFFER SE TOESTAND

In 'n emosionele oomblik in die hof het Gabriel in trane uitgebars terwyl hy Shiweda se verslegtende toestand beskryf het en gesê het haar longe, lewer en niere is besig om te verswak. Aanklaers wat in die hof teenwoordig was, was ook emosioneel toe die toestand van hul kollega beskryf is.

Die borgtogaansoek sal Woensdag voor landdros Lutaka Billy Mutwa voortduur, wanneer Elago na verwagting vir Gabriel onder kruisondervraging sal neem. Die staat word deur die adjunk-aanklaer-generaal van Oshakati Tangeni Iitula verteenwoordig en deur die Ondangwa-beheeraanklaer Yeukai Kangira bygestaan.

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WEER

BINNELAND: Mooiweer en baie warm in die Suide en Weste. Elders gedeeltelik bewolk en warm tot baie warm met enkele tot geïsoleerde donderbuie in die Noordooste.

KUS: Gedeeltelik bewolk en matig tot warm, maar mooiweer en winderig in die Suide.

GETYE BY WALVISBAAI: H: 03:47 **L:** 09:50 **H:** 16:02

VOORUITSIGTE

WINDHOEK	17°	33°
RUNDU	19°	34°
OSHAKATI	19°	34°
GOBABIS	19°	34°
MARIENTAL	20°	36°
KEETMANSHOOP	19°	36°
WALVISBAAI	16°	25°
LUANDA	23°	29°
JOHANNESBURG	15°	27°
KAAPSTAD	13°	23°

Graad 11's

VAN BL. 1

NSFAF-REËLS BLY BASIS VIR 2026

Die ministerie het verduidelik dat vir 2026 befondsingsgeskiktheid steeds bepaal sal word deur die bestaande NSFAF-vereistes te gebruik, ten spyte van die bekendstelling van nuwe minimumstandaarde vir hoër onderwys.

"Vir die akademiese jaar 2026 sal die vereistes van die Finansiële Hulpfonds vir Namibiese Studente die basis bly vir die bepaling van befondsingsgeskiktheid."

Dit het beklemtoon dat toelating tot 'n tersiêre instelling nie outomaties befondsing waarborg nie.

"Toelating tot 'n tersiêre instelling waarborg nie outomaties befondsing nie, maar befondsingsbesluite sal gelei word deur die bestaande deursigtige vereistes," het amptenare gesê.

Die ministerie het ook aangekondig dat die huishoudelike inkomstedrempel vir nie-onderrigdoeleindes tot N$300 000 verhoog is, wat toegang tot lewenskostecosteun uitbrei.

GEMARGINALISEERDE GEMEENSKAPPE

Amptenare het die regering se verbintenis tot inklusiwiteit herbevestig, veral vir histories gemarginaliseerde gemeenskappe.

"Die ministerie bly bewus van die historiese uitdagings en opvoedkundige hindernisse waarmee histories gemarginaliseerde gemeenskappe, insluitend die Ovatue, Ovahimba en die San, te kampe het," is by die mediakonferensie gesê.

Geteikende administratiewe ondersteuningsmaatreëls sal steeds toegepas word om hierdie groepe in staat te stel om op 'n billike basis toegang tot tersiêre onderwys te verkry.

NAGRAADSE STUDIES

In reaksie op kommer van studenteleiers oor honneursgrade en Vlak 8-kwalifikasies, het die ministerie bevestig dat Vlak 8-studies wat deel vorm van 'n primêre voorgraadse kwalifikasie, befonds sal word.

"Ons wil jou verseker dat dit op hierdie stadium nie as 'n nagraadse kwalifikasie beskou word nie. Daarom sê ons voltooi eers jou primêre graad," het amptenare gesê.

Nuwe nagraadse studies sal egter nie in 2026 befonds word nie.

"Wanneer jy vir meesters- en PhD-grade gaan, sê ons dat ons daaraan werk, maar nie nou in die nabye toekoms nie," terwyl die ministerie bevestig het dat bestaande nagraadse NSFAF-kontrakte sal voortduur.

NSFAF se uitvoerende hoof vir finansies, Vetumbuavi Urinavi, wat instaan vir waarnemende uitvoerende hoof, Kennedy Kandume, het bevestig dat vlak 8-kwalifikasies as voorgraads vir befondsingsdoeleindes behandel word.

"Dit word as deel van die voorgraadse kursus beskou. Dit is dus ook deel van die befondsing," het Urinavi gesê.

"Ons is in 'n oorgangsfase en vir die 2026 akademiese jaar sal ons die bestaande befondsingsvereiste toepas, terwyl ons die implementeringspad na 2026 ondersoek."

UNAM VERWERP GRAAD 11

Die Universiteit van Namibië (Unam) se woordvoerder, Simon Namesho, het gesê die instelling moedig leerlinge aan om hoërskoolonderrig te voltooi, maar erken alternatiewe roetes.

"Ons sterkste punt is om te sê dat ons graad 11-leerlinge aanmoedig om na graad 12 te vorder," het hy gesê, terwyl hy aangedui het dat gereedheids- en oorbruggingsprogramme bestaan.

Unam-direkteur Maggy Beukes-Amiss het 'n beroep op stelselwye samewerking gedoen: "Ons moet saamwerk om gehaltestandaarde vir hierdie nasie te handhaaf. Ons wil hê ons kinders moet wêreldwyd meeding," het sy gesê.

Tsumis-Garises het argumente verwerp dat gewone kwalifikasies akademiese gehalte ondermyn en teenstrydighede in streke in Suider-Afrika uitgewys.

"IGCSE-kandidate van Botswana kom in Unam in. Leerlinge op gewone vlak van Zimbabwe en Zambië word toegelaat, maar ons laat nie Namibiese leerlinge op gewone vlak toe nie," het sy gesê. "Hou asseblief op om oor graad 11 en graad 12 te praat. Dan ken jy nie jou stelsel nie en maak voorsiening vir ons kinders," het sy bygevoeg.

Steenkamp het die betrokkenheid verwelkom en gesê die inligtingsessie was daarop gemik om duidelikheid te gee en openbare vertroue te herstel.

"Dit is regtig belangrik dat ons nie op tersiêre vlak oor graad 11 of graad 12 praat nie. Ons verwys na die sertifisering. Hierdie vergadering is in goeder trou gehou. Dit is om te onderrig, in te lig, duidelikheid te skep, begrip en konsensus te bou," het sy bygevoeg.

Die ministerie het die media versoek om te help met die verspreiding van akkurate inligting soos NSFAF-registrasies later vandeesmaand open.

– elizabeth@nmh-hub.com.na

RIVIERSTRAAT IN OLYMPIA

Nee, daar was nie gister 'n donderbui in die Olympia-woonbuurt in die hoofstad nie, maar die water het soos 'n rivier gestroom nadat 'n waterpyp gister omstreeks 07:00 gebars het. FOTO'S TONY EDMUNDS

Vlugtelinge

VAN BL. 1

Verteenwoordigers van Swapo, amptenare van die VN en leiers van die betogers het die vergadering bygewoon om die bewerings te bespreek en 'n pad na oplossing te ondersoek.

Die groep het volgehou die finansiële steun wat na bewering tydens die geskiedkundige repatriasie belowe is, óf wanbestuur óf nooit gelewer is nie.

Hulle beweer verder herhaalde verduidelikings van Swapo en die VN is onvoldoende sonder toegang tot amptelike rekords wat toon hoe die fondse hanteer is.

Sommige van die voormalige vlugtelinge het gister steeds buite Swapo se hoofkantoor gekamp, ten spyte daarvan dat hulle meegedeel is dat die saak gesluit is en dat geen fondse beskikbaar was nie.

'GEEN BEWYSE'

Swapo se sekretaris-generaal, Sophia Shaningwa, het gesê 'n deeglike hersiening van die party se rekords, insluitend dié van die ampstermyn van haar voorgangers, het geen bewyse gevind dat fondse wat vir die terugkerendes bedoel is, deur die party ontvang, teruggehou of misbruik is nie.

"Ons party hou omvattende lêers van alle inkomste en uitgawes," het Shaningwa gesê. "Nadat ons hierdie rekords hersien het, het ons geen interne bewyse gevind wat die bewerings wat deur die betogers geopper is, ondersteun nie."

Sy het gesê die VN is na die vergadering genooi om deursigtigheid en billikheid te verseker, veral met betrekking tot die bewerings dat Swapo skenkerfondse tydens die repatriasieproses wanbestuur het.

Shaningwa het gesê die betrokkenheid was bedoel om geskiedkundige konteks, deursigtigheid en afsluiting te bied en het die party se verbintenis tot diegene wat tot Namibië se bevryding bygedra het, herhaal.

"Swapo bly daartoe verbind om die bydraes van veterane van die bevrydingstryd te eerbiedig en geskiedkundige sake aan te spreek op 'n manier wat die waardigheid van diegene wat vir ons onafhanklikheid geveg het, handhaaf."

In 2017 het die voormalige minister van inligting, Tjekero Tweya, gesê Namibië het nie met onafhanklikwording geld van die VN ontvang vir die herintegrasie van Namibiese vlugtelinge en dié in ballingskap nie.

"Die posisie van die VN is duidelik: Daar is geen fondse om te eis nie. Daar is geen voordele of geld wat aan Namibiese terugkerendes betaal moes gewees het in die konteks van die implementering van Resolusie 435 nie," het Tweya destyds gesê.

Hy het bygevoeg dat die VN se Hoëkommissariaat vir Vlugtelinge (UNHCR) tot die gevolgtrekking gekom het dat geen fondse wat vir die Namibiese 1989-repatriasie opsy gesit is, deur die agentskap misbruik of behou is nie.

UNHCR

Namens die VN het die UNHCR se verteenwoordiger vir Suider-Afrika, Kavita Belani, herbevestig dat alle bystand wat tydens die 1989-repatriasie verskaf is, vrywillig was, volledig verantwoordbaar was en amptelik gesluit was. Sy het gesê dat enige onbestede skenkerfondse in ooreenstemming met standaard- finansiële prosedures na die VN-hoofkantoor teruggesorg is.

"Die VN se rol was beperk tot die fasilitering van die veilige terugkeer van vlugtelinge en die verskaffing van basiese ondersteuning vir herintegrasie," het Belani gesê en bygevoeg: "Verantwoordelikheid vir langtermyn-rehabilitasie en hervestiging berus by die Namibiese regering."

Sy het verder beklemtoon dat die VN die afgelope paar jaar konsekwent dokumentasie gedeel, op kommer gereageer en met regeringsowerhede gekoördineer het om enige uitstaande vrae op te klaar.

Die VN het gesê dat hulle by verskeie geleenthede met verteenwoordigers van die voormalige vlugtelinge vanaf 2017 en tot Februarie 2025 gesels het.

Tydens 'n vergadering in Maart 2021 het die groep na bewering konsensus met die VN bereik dat die organisasie se mandaat vervul is en dat verdere betrokkenheid by nasionale owerhede nagestreef moet word.

Ten spyte hiervan, dring die Voormalige Vlugtelinge Repatriasievereniging van Namibië daarop aan dat die VN na bewering nie rekenskap gegee het van N$21,7 miljoen wat hulle sê bedoel was vir die herintegrasie van Namibiese terugkerendes nie.

Aina Angula het Saterdag namens die betogers gesê die groep is nie oortuig nie en soek steeds duidelikheid oor die beweerde ondersteuning wat ten tyde van hul terugkeer belowe is.

Sy het beweer dat hoewel korrespondensie, verslae en rekords tussen die VN, Swapo, die Raad van Kerke van Namibië en ander owerhede bestaan, die vlugtelinge nog nooit 'n finale, amptelike bevestiging ontvang het wat die probleem oplos nie.

Angula het gesê hulle eis al vir ten minste drie tot vier jaar antwoorde, met protesoptogte wat sedert middel-2022 toegeneem het.

Sy het gesê betogers het voorheen "geen geld, geen stem"-protesoptogte gehou en dat talle 36 jaar nadat hulle na Namibië teruggekeer het, steeds op antwoorde wag.

– phillipus@nmh-hub.com.na

Appendix B: Consultant's Curriculum Vitae

ENVIRONMENTAL ASSESSMENT PRACTITIONER Johann Strauss

Johann Strauss holds an B.A degree in Geography with Psychology and Environmental Management from the Northwest University (NWU) South Africa. He is currently in the process of pursuing his honours degree in environmental management from the University of South Africa (UNISA). He entered the environmental assessment profession at the end of 2022 and since then has worked on various Environmental Impact Assessments including assessments of the petroleum industry, irrigation schemes, tourism and transport industry.

CURRICULUM VITAE JOHANN STRAUSS

Name of Firm	:	Geo Pollution Technologies (Pty) Ltd.
Name of Staff	:	Johann Strauss
Profession	:	Environmental Assessment Practitioner
Years' Experience	:	3
Nationality	:	Namibian
Position	:	Environmental Consultant
Specialisation	:	Environmental Impact Assessments
Languages	:	Afrikaans – speaking, reading, writing – excellent English – speaking, reading, writing – excellent

EDUCATION AND PROFESSIONAL STATUS:

B.A Geography with Psychology and Environmental Management : North West University, 2021

AREAS OF EXPERTISE:

Knowledge and expertise in:

- Environmental impact assessments
- Environmental management plans
- Environmental monitoring
- Environmental auditing and compliance
- Basic Geographic Information Skills (Manifold)
- Water use licensing
- Hydrocensus

EMPLOYMENT:

2022-Date : Geo Pollution Technologies – Environmental Consultant

PUBLICATIONS:

Contract reports : 26