Excel Dynamic Solutions (Pty) Ltd

THE ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR THE OPERATIONS OF THE EXISTING FUEL RETAIL STATION IN OKAMATAPATI, OTJOZONDJUPA REGION.

TO SUPPORT THE APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC).

VERSION:DRAFT

ECC APP NO: 007347

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1 INTRODUCTION

1.1 Project Background

Northern Fuel Distributors CC (The Proponent) is the renowned local distributor of a diverse range of products through its network of facilities across the country, supplying diesel, petrol, lubricants, and engine oils. The service station has been in operation since 1987 without an ECC. The Proponent plans to continue operating the existing Fuel Retail Facility (Filling Station hereafter) in Okamatapati, in the Otjozondjupa Region. The location map and layout of the filling station are presented in (Figures 1) and (Figure 2).

The installation and handling of hydrocarbons (fuels) is one of the listed activities in the Environmental Impact Assessment (EIA) Regulations (2012) of the Environmental Management Act (EMA) No. 7 of 2007 that may not be undertaken without an Environmental Clearance Certificate (ECC). The listed activities that are relevant to the ongoing project activities are as follows:

-Listed Activity 9. Hazardous Substance Treatment, Handling, and Storage

9.1 The manufacturing, storage, handling, or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974.
9.4 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.
9.5 Construction of filling stations or any other facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid, petroleum, gas, or paraffin.

Subsequently, to comply with the EMA and its EIA Regulations, and to ensure environmental sustainability, the Proponent has appointed Excel Dynamic Solutions (EDS), an independent environmental consultant, to apply for the ECC on its behalf.
EDS lodged an application for the ECC with the Ministry of Environment, Forestry and Tourism (MEFT)'s Department of Environmental Affairs and Forestry (DEAF). Upon screening of this Background Information Document (BID), EDS will be required to prepare an Environmental Management Plan (EMP) in an application for the ECC. The EMP will be submitted to the MEFT for evaluation and ECC consideration.

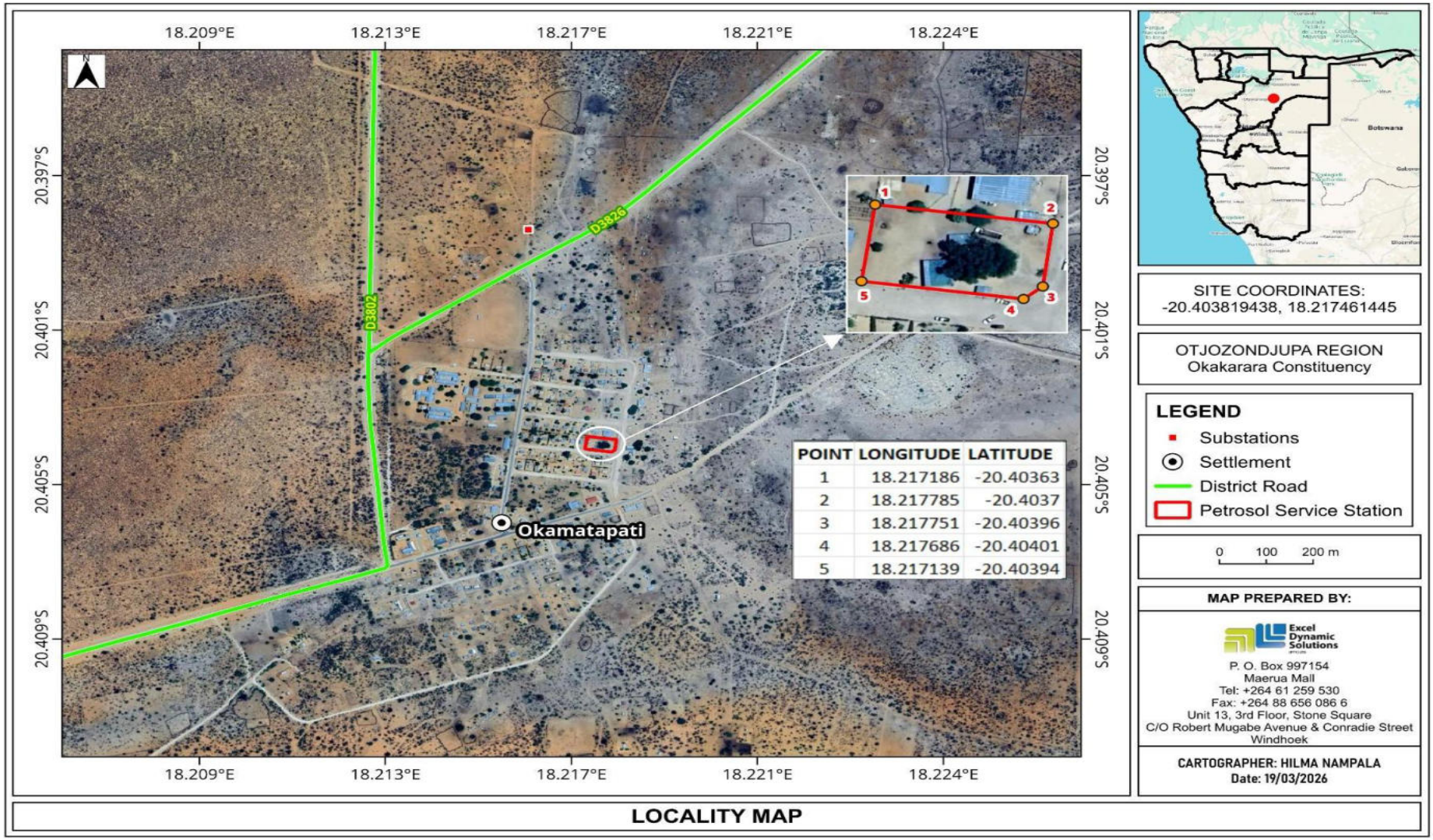

Figure 1: Locality Map

Figure 2: Site layout

1.2 Project Description

The project comprises an existing small-scale fuel retail station located in Okamatapati, within the Otjozondjupa Region. The facility currently operates as a roadside filling station providing fuel services to local residents, passing motorists, and nearby farming and transport activities.

As observed during the site visit, the station consists of two fuel dispensing pumps installed on a concrete hard standing platform beneath a simple corrugated iron canopy structure supported by timber poles.

The surrounding area is largely unpaved and sandy, with vehicle access directly from the adjacent road. The facility appears to be a modest rural fuel outlet designed to service the surrounding community and road users. The station infrastructure includes the dispensing units, associated underground fuel storage system, and a basic protective shelter over the dispensing area.

The Proponent plans to continue to carry out the following activities until decommission, if required:

- **Operation and maintenance** - This is the phase during operation where the Proponent carries out fuel dispensation-related activities on site. It is also the phase during which the Proponent is expected to maintain the area, equipment, and infrastructure.
- **Periodic environmental monitoring** - To support and ensure that the proposed mitigation measures are achieving the desired results, a monitoring plan must be implemented alongside the mitigation plan.
- **Decommissioning and rehabilitation** – Decommissioning, if ever required, will involve the removal of all infrastructure not needed for the future use of the land from the site. Rehabilitation of the land may be necessary, and any pollution of the soil that may have occurred must be remediated.

1.3 Environmental Baseline

The existing fuel station facility is located in Okamatapati, within the Otjozondjupa Region.

The environmental baseline conditions provide a description of the current state of the receiving environment. This process facilitates the identification of environmentally and socially sensitive receptors, thereby supporting the development of appropriate mitigation and management measures in accordance with the requirements of the Environmental Management Act No. 7 of 2007.

1.3.1 General Topographic Setting

The topography of the project area is relatively uniform, with only minor variations in elevation across the landscape. Elevation values range approximately between 1,260 m and 1,340 m above mean sea level, indicating a gently undulating terrain rather than steep or rugged relief.

Most of the area falls within a narrow elevation range around 1,300–1,320 m, which reflects a consistent surface level across the broader landscape. Localized areas of slightly lower and higher elevation occur sporadically, but these differences are minimal and do not form distinct topographic features such as valleys or ridges (Atlas of Namibia Team, 2022).

The absence of tightly clustered elevation changes or sharp gradients implies that slopes across the area are generally gentle. This type of terrain is typical of Kalahari Sandveld landscapes, where surface relief is subdued and shaped by gradual geomorphological processes rather than tectonic activity or significant erosion.

Within and around the highlighted project footprint, the elevation remains consistent with the surrounding terrain, indicating no topographic constraints such as steep slopes, ridges, or valleys. As a result, the area is likely to have good accessibility and minimal limitations related to terrain.

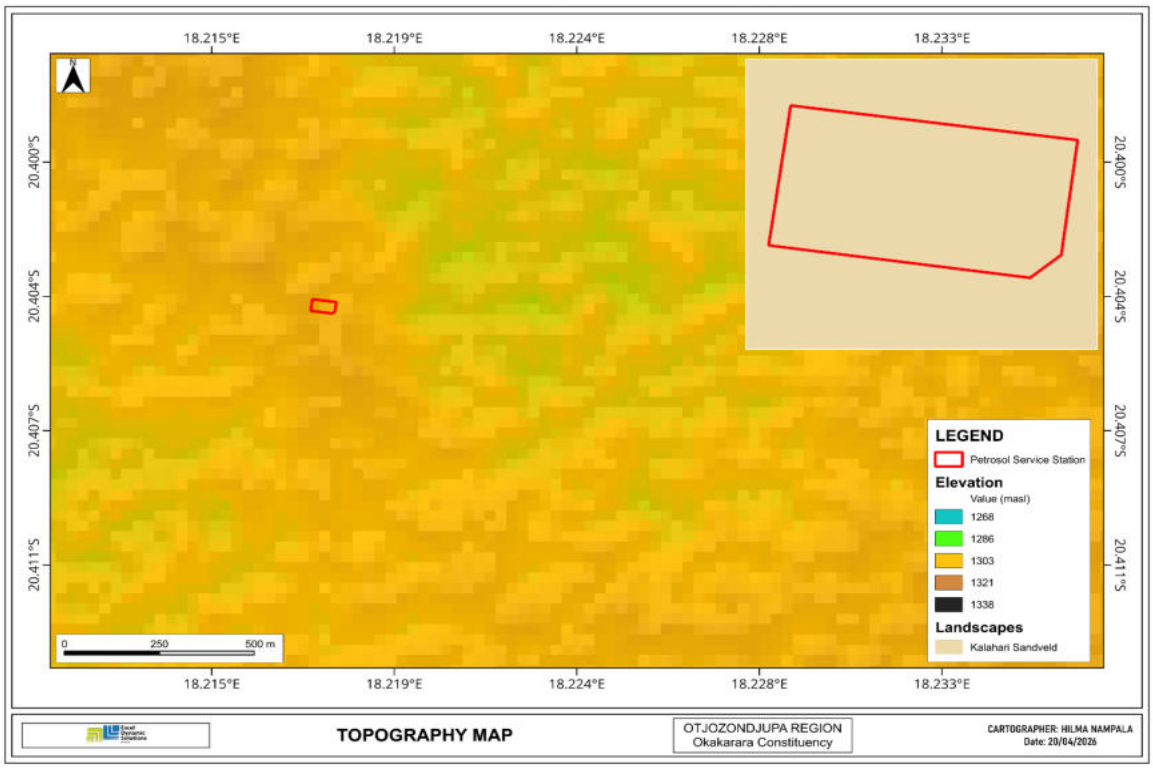

Figure 3: Topography Map

1.3.2 Surface Water and Groundwater

The hydrological conditions within the area are characterised by generally moderate groundwater vulnerability across the broader landscape, which shows that groundwater resources are present but are moderately susceptible to contamination from surface activities, depending on site management and soil conditions.

The project footprint is situated within this moderately vulnerable zone, indicating that any potential pollutants could infiltrate the subsurface over time if not properly controlled. However, the level of vulnerability is not extreme, meaning that with appropriate mitigation measures, risks to groundwater can be effectively managed.

A portion of the surrounding area is associated with geological formations that have low groundwater potential. These rock bodies typically do not store or transmit significant amounts of groundwater, although there may be localized zones where moderate potential exists. This indicates that groundwater availability in the vicinity may be limited and unevenly distributed (Mendelsohn, Jarvis, Roberts, & Robertson, 2002).

The presence of boreholes in the wider area confirms that groundwater is being utilized, although their distribution suggests that access points are relatively sparse and likely depend on favourable local conditions.

Within the immediate project area, no major surface water features such as rivers or drainage channels are evident, reinforcing the reliance on groundwater as the primary water resource. Overall, the hydrological setting reflects a semi-arid environment with moderate groundwater sensitivity, limited

storage potential in underlying rock formations, and a dependence on carefully managed groundwater resources.

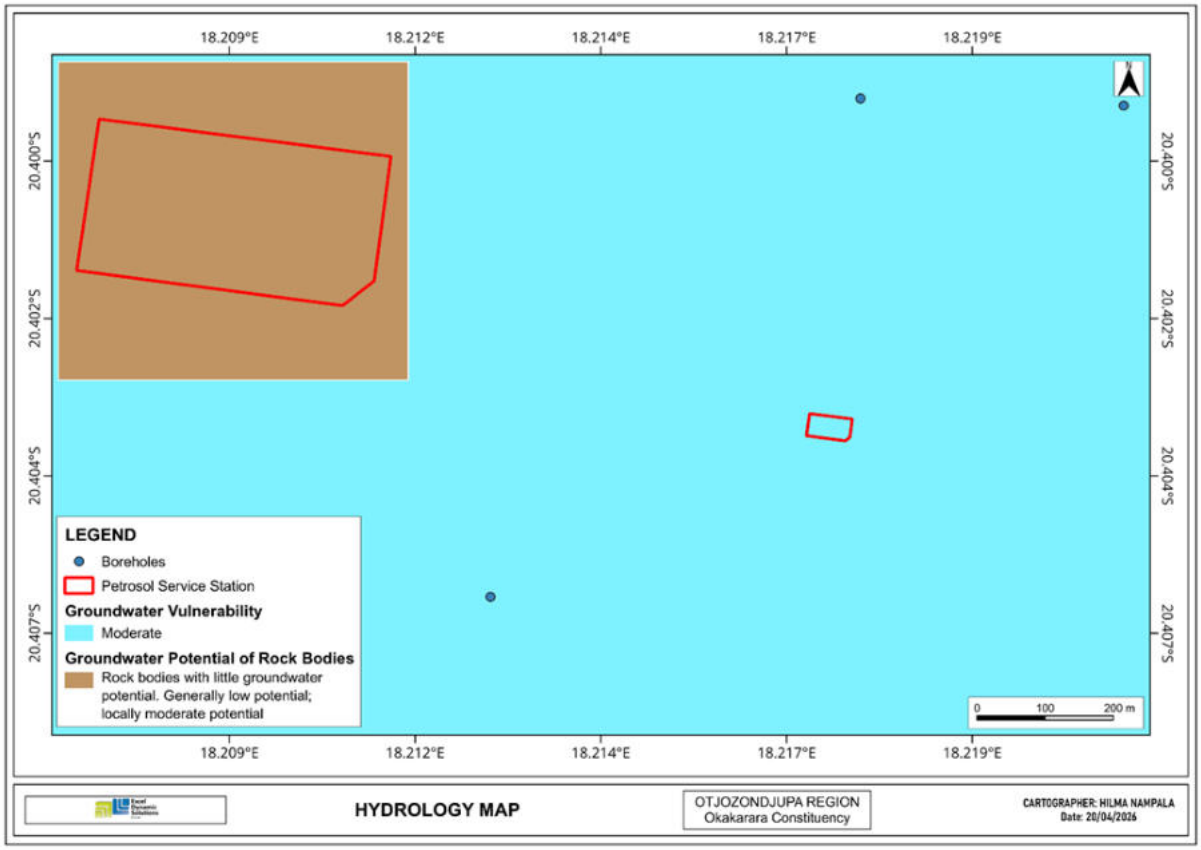

Figure 4: Hydrology Map.

1.3.3 Soils

The soil distribution within the project area is uniform, with the entire area underlain by Ferralic Arenosols. This indicates that there is no significant spatial variation in soil type across the site and its immediate surroundings.

Ferralic Arenosols are typically sandy, well-drained soils that develop under conditions of prolonged weathering. They are generally characterised by low natural fertility due to the leaching of nutrients, which is common in semi-arid environments. The sandy texture allows for rapid water infiltration, but it also results in low water retention capacity, meaning moisture is not held in the soil for extended periods (Atlas of Namibia Team, 2022).

Within the project footprint, the presence of this soil type suggests stable and consistent ground conditions, with no indication of clay-rich, waterlogged, or highly erodible soils that could pose constraints. However, the loose, sandy nature of the soil may make it susceptible to wind erosion, particularly in areas where vegetation cover is disturbed.

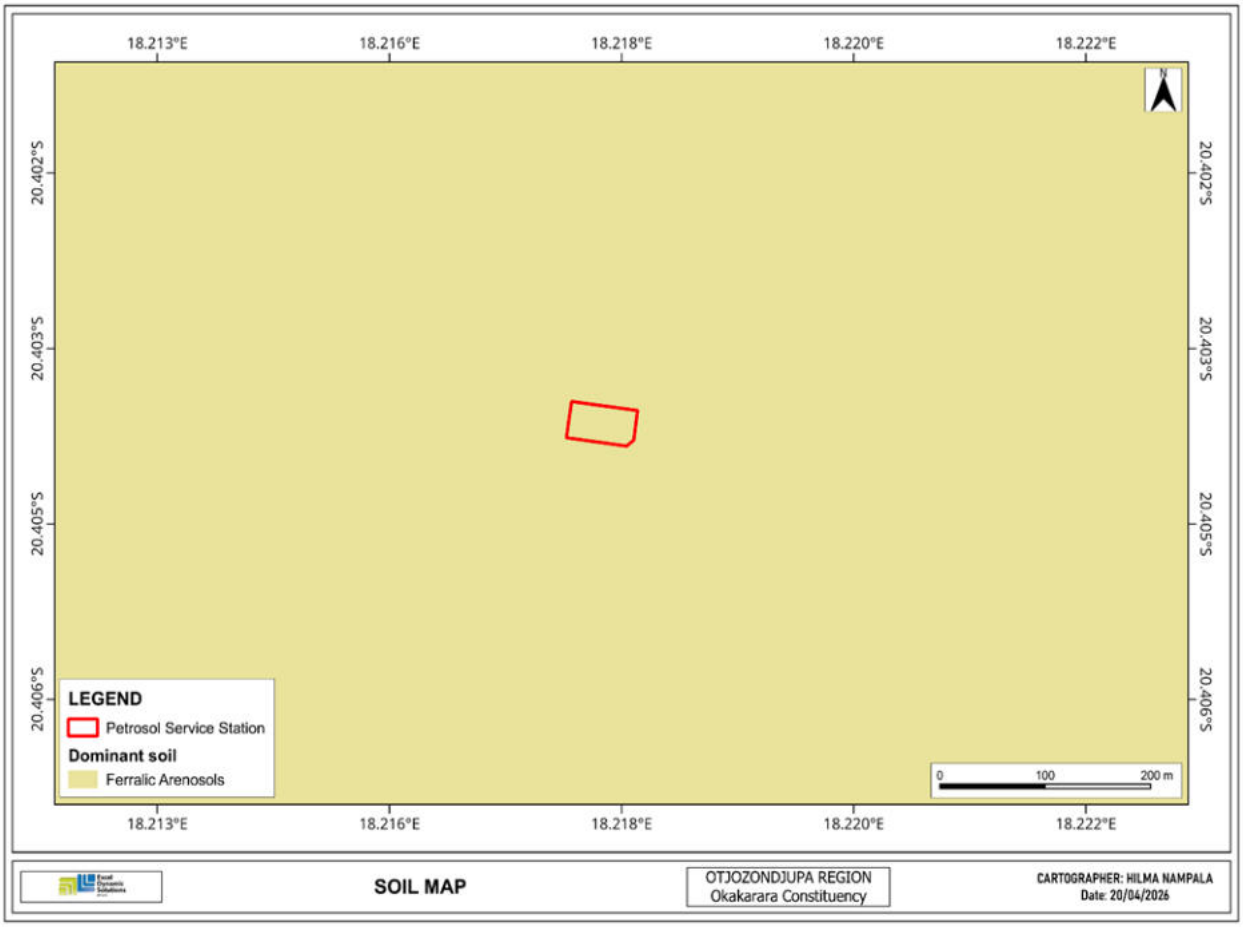

Figure 5: Soil Map.

1.3.4 Vegetation

The vegetation distribution within the area reflects a predominantly semi-arid ecological setting with limited but distinct spatial variation. The area is largely dominated by Central Kalahari vegetation, which forms the primary natural landscape. This vegetation type is characteristic of semi-arid environments and consists of drought-adapted plant communities suited to sandy soils and low, variable rainfall conditions.

Within this broader vegetation unit, smaller pockets of ecological variation are present, particularly toward the northeastern portion of the mapped area. These include sections classified as Savanna, typically characterised by a mixture of grasses and scattered trees. In close association with this, there are areas where *Acacia erioloba* is the dominant species, indicating localized conditions that support woody plant growth within an otherwise semi-arid environment. These variations highlight subtle differences in soil conditions, moisture availability, and microclimate across the landscape (Atlas of Namibia Team, 2022).

Overall, the area is characterised by a predominantly uniform vegetation type with localized ecological variation.

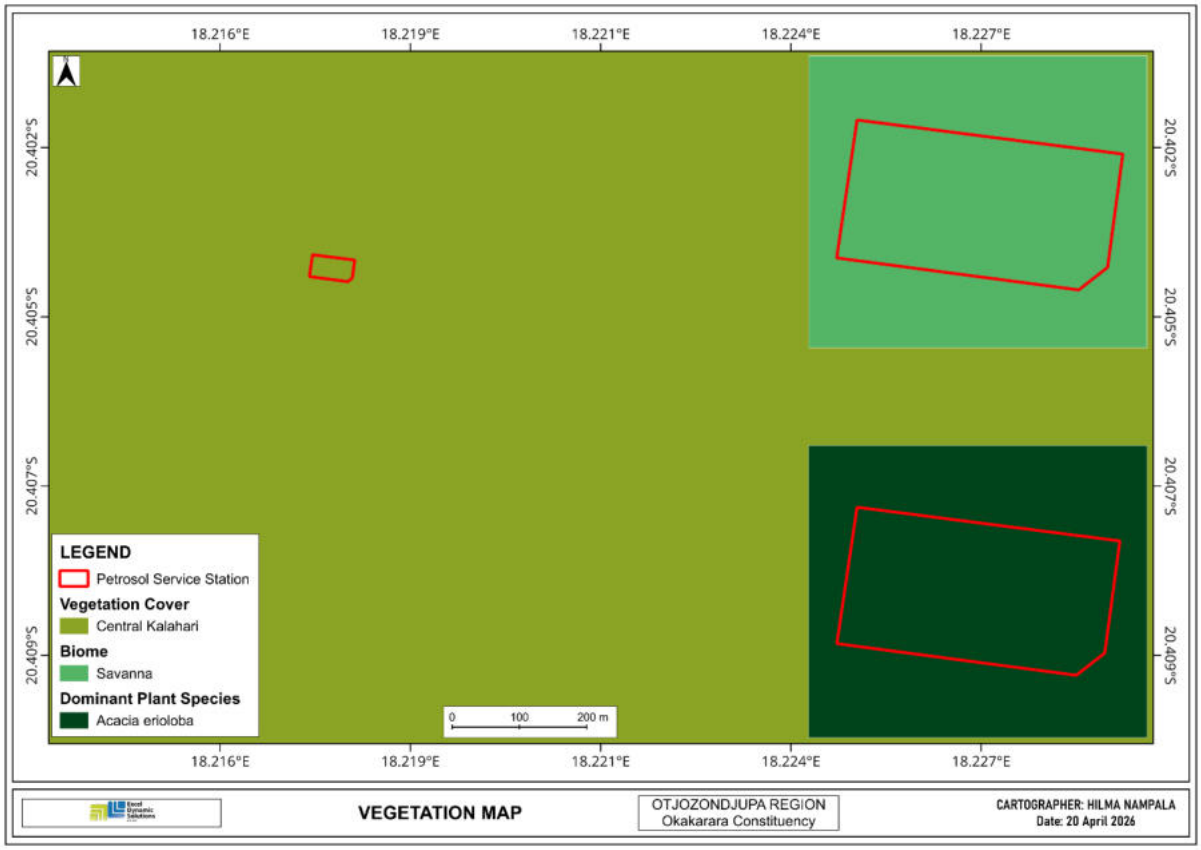

Figure 6: Vegetation Map.

1.4 Aim of the updated Environmental Management Plan (EMP)

Regulation 8(j) of the EIA Regulations (2012) requires that a draft Environmental Management Plan (EMP) shall be included as part of the Environmental Assessment (EA). A 'Management Plan' is defined as:

"…a plan that describes how activities that may have significant environmental effects on the environment are to be mitigated, controlled and monitored."

An EMP is one of the most important outputs of the EA process. Synthesizes all the proposed mitigation and monitoring actions, set with specific assigned responsibilities. Additionally, it provides a link between the impacts identified in the EA process and the required mitigation measures. It is important to note that an EMP is a statutory document, and a person who contravenes the provisions of this EMP may face imprisonment and/or a fine. This EMP is a living document and can be amended to address project changes/or environmental conditions, and feedback from compliance monitoring.

The purpose of this document is, therefore, to guide environmental management throughout the different phases of the project activities:

- **Operation and maintenance** - This is the phase during operation where the Proponent carries out fuelling and undertakes related activities on site. It is also the phase during which maintenance of the area, equipment and machinery is expected to be done by the Proponent.
- **Environmental Monitoring Requirements** - In order to support and ensure that the proposed mitigation measures are achieving the desired results, a monitoring plan must be implemented alongside the mitigation plan.
- **Decommissioning and Rehabilitation** – This is the phase during which operations at the fuel retail facility cease. The decommissioning of operations may be considered once the need for the fuel retail facility diminishes. During the operational phase and before decommissioning, the Proponent will need to implement site rehabilitation measures.

1.5 Appointed Environmental Assessment Practitioner

Excel Dynamic Solutions (Pty) Ltd has been appointed as the external Environmental Control Officer (ECO) to ensure EMP compliance with the conditions of authorization for operations at the Fuel Retail Facility, to perform environmental monitoring and auditing, and to produce an updated EMP and environmental compliance report for the proponent.

2 EMP ROLES AND RESPONSIBILITIES

The Proponent is ultimately responsible for implementing the EMP. However, the Proponent may delegate this responsibility at any time, as they deem necessary.

2.1 Environmental Management Plan Actions and Audit

The EMP's management actions aim to avoid potential negative impacts wherever possible. Where impacts cannot be avoided, measures are provided to reduce their significance. It is therefore important for the Proponent/Environmental Manager to ensure adherence to the management actions.
Management actions recommended for the potential impacts rated for the Fuel Retail Facility were based on the phases listed below:

- Phase 1: Operational and maintenance (Table 1)
- Phase 2: Decommissioning and Rehabilitation (Table 2)

The people responsible at Okamatapati Service Station should assess these commitments in detail and should acknowledge their commitment to the specific management actions detailed in the EMP. The compliance, thereof, is measured in Tables 1 and 2.

2.2 Management Action Plan: Operation (and Maintenance) Phase

The management actions recommended for this phase are presented in Table 1 below.

Key Potential Negative Impacts

The potential impacts anticipated for the operations onsite are listed below. Mitigation measures or management action plans were also made for the negative impacts to maximize the positive ones.
The impacts that had been identified and managed on site are as follows.

Positive impacts:

- Maintained job opportunities
- Uninterrupted supply of fuel to retailing facilities and other consumers
- Regulatory Compliance and Risk Reduction

Negative impacts:

- Risk of fire (accidental fire outbreaks)
- Waste generation
- Dust generation
- Air quality and emissions
- Noise impacts
- Soil and water resources contamination
- Impact on Fauna and Flora
- Visual impact
- Vehicular impact
- Health, safety and security
- Grievances
- Heritage impact

The mitigation measures and the responsible parties during operational phase in this EMP are set out in Table 1 Below:

Table 1: Environmental and Mitigation Measures for the operational phase

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
Emp and training implementation	EMP required licenses, agreements and permits	-Ensure that the contents of the EMP are understood by the contractor, subcontractors, employees, and all personnel who will be present on site. -Apply for the necessary permits or licenses from the various authorities or ministries that govern the operations of the project. -Conduct induction training for all new staff before commencing work.	- Proponent	-All contracts, permits, certificates and other legal documents must be obtained.
Fires	Outbreak of accidental fires	-The holistic fire protection and prevention plan should still be utilized onsite. -Experience has shown that the best chance to put out a major fire rapidly is in the first 5 minutes. It is essential to recognize that a responsive fire prevention plan encompasses not only the availability of firefighting equipment, but more importantly, it involves proactive measures and activities to prevent, mitigate, and avoid conditions that may lead to fires.	- Proponent, -SHE/ECO,	-Any incidents reported are recorded together with the steps taken to mitigate the impacts. -Fire extinguisher serviced as recommended by the manufacturer.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		- Site must be equipped with sufficient firefighting resources including fire extinguishers, sand buckets and fire hoses. - Regular surveys (monthly) of all firefighting equipment must be carried out. - All staff must be trained on fire evacuation procedures and fire extinguisher use. - No smoking within 10 m of fuel dispensing areas. - Emergency contact numbers (Fire Brigade, Police) displayed prominently on site.		

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
Waste generation	-The ability of the product to act as a waste which must be cleaned up, and soil that has been polluted on site by hydrocarbons must be treated as hazardous waste.	- Waste generated on site must be sorted at source (recyclables, general, hazardous). - All waste must be disposed of at an approved landfill or licensed waste facility. - Labelled bins for different waste types must be provided and maintained on site. - Site ablution facilities must be maintained for staff and visitors. - Hydrocarbon-contaminated soils and materials must be treated as hazardous waste. - A waste disposal checklist must be maintained and updated regularly.	-SHE/ECO	- Regularly conduct waste inspections on site, -Weekly disposal of waste from the site to the appropriate landfill. -A checklist of waste disposal must be maintained on site. -Waste disposal manifests maintained. No illegal dumping incidents.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
Dust Generation	Dust generated by vehicle movements on unpaved surfaces and site activities	- All unpaved access roads and parking areas must be watered during dry and windy conditions to suppress dust. - Vehicle speeds within the site must be limited to 10 km/h. - Stockpiling of loose materials on site must be minimized and covered when not in use. - Dust complaints from neighbouring properties must be recorded and addressed promptly. - Housekeeping of the site must be maintained to prevent dust accumulation.	Site Manager, All project workers	-No dust-related complaints unresolved. -Complaint register maintained. -Dust suppression records kept.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
Air Quality and Emissions	Emissions from vehicles, fuel vapours and generators	- Vehicle emissions from delivery tankers must comply with national emission standards. - Vapor recovery units must be installed and maintained on fuel dispensing equipment where applicable. - Any generator or auxiliary equipment on site must be regularly maintained to minimize emissions. - Burning of waste on site is strictly prohibited. - Fuel tanks must be inspected regularly for vapor leaks and all leaks repaired immediately. -Engine idling at the site should be discouraged.	Proponent, Site Manager, SHE/ECO	-No open burning incidents. -Equipment maintenance records kept. -Vapor recovery equipment in working order.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
Noise	Noise from vehicle movements, generators and operations affecting surrounding community	- Operating hours must be managed to minimize noise impacts on adjacent residential areas. - Generators and mechanical equipment must be maintained regularly to reduce noise emissions. - Fuel delivery activities (large tankers) should be scheduled during daytime hours (07:00 - 19:00) where possible. - Noise complaints from neighbouring properties must be recorded in the complaint register and addressed within 7 working days. - All vehicles and equipment on site must meet relevant noise emission standards. Loud music from vehicles fuelling up should be restrict and drivers asked to lower the volume.	- Site Manager	-No unresolved noise complaints. -Equipment maintenance logs up to date.
Soil and Water resources	Accidental spills of fuel and other chemicals used on-site may occur.	-Any fuel spills detected on site must be reported, and remediation action must be taken accordingly. -Any soils contaminated by hydrocarbon on site must be carefully removed, transported, and disposed of at an	- Site Manager - All project workers	- Reports for all hydrocarbon leaks on site are conducted by the Health and Safety Officer onsite. - Spill response reports filed. - Separator pit inspection records maintained.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		appropriate site. -All workers on site must be trained on how to handle soil and water waste, to reduce the impacts. -Soil pollution must be prevented on site to ensure that contaminants do not affect the groundwater resources around the project area. - Existing tracks must be used to minimize the footprints on the already sensitive soils on site. - Soil pollution must be prevented to ensure contaminants do not affect groundwater resources. - Existing drainage and separator pit must be inspected and cleaned regularly (minimum quarterly). - Bunded storage areas must be maintained for all chemical storage. - Underground storage tanks must be inspected and tested for leaks annually. - Existing ablution facilities should be used, no public urinating.		

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		- Servicing or maintenance of vehicles onsite should not be conducted onsite.		
Fauna and Flora	Impact on indigenous vegetation and wildlife from site operations and hydrocarbon contamination	- Vegetation disturbance must be limited to the operational footprint of the site. - Any removal of protected plant species requires a permit from the nearest Forestry Office (MEFT). - Hydrocarbon spills must be contained and remediated immediately to prevent contamination of soil and vegetation outside the site boundary. - No illegal dumping of waste in surrounding natural areas. - Any wildlife observed on site must be reported to MEFT and must not be harmed or disturbed.	-Site Manager, SHE/ECO	-No unauthorized vegetation clearing. -No wildlife disturbance incidents. -Spill containment records maintained.
Visual Impact	This has an impact on the aesthetic appearance of the site.	- The site must be kept tidy and free of litter and waste at all times. - Signage must be maintained in good condition and comply with relevant by-laws. - Night lighting must be directed to minimise light spill onto adjacent	- Site Manager - All project workers	-A Compliant register must be kept on site. -Regular site inspections conducted. -No unresolved complaints.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		properties. - Infrastructure must be maintained in good condition and painted/repaired as required.		
Heritage Impact	-Archaeological significance might be discovered on site.	- If any archaeological significance is discovered on site, work must cease immediately in the affected area. - Discoveries must be reported to the National Heritage Council of Namibia. - The Chance Finds Procedure (Appendix B) must be followed at all times. - The Site Manager must be trained on the importance of heritage significance and the reporting obligations under the National Heritage Act. - A heritage discovery register must be maintained on site.	-Site Manager	-A register book for any possible discovery must be present on site.
Health, Safety and Security	Handling machines or equipment can cause injuries.	- No unauthorized people should be allowed on the operational forecourt area. - All workers must be provided with appropriate PPE (safety footwear, hi-vis vests, gloves, eye protection as applicable).	- SHE/ECO -Site Manager	- A health, safety and security register must be kept on site to record any near misses, accidents, and incidents that have occurred on site. -H&S register maintained. Incident register kept. PPE compliance verified. - Monthly toolbox talk records.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		- A Health and Safety Management System must be implemented and maintained on site. - Appropriate safety signage and warnings must be erected in all relevant areas on site. - A first aid kit must be available on site at all times and maintained in good condition. - Regular toolbox talks (minimum monthly) must be conducted with all staff. - All incidents and near misses must be reported and recorded in the incident register. -Prevent illegal access to the work sites, by implementing appropriate security measures. These security measures must not pose a threat to persons or motorists frequenting the site.		
Vehicular impacts		- All project drivers must hold a valid driver's license for the class of vehicle operated. - No person under the influence of alcohol or drugs will be allowed to operate any	Site Manager	-Any complaint received regarding traffic issues should be recorded and action must be taken accordingly according to the complaint.

Aspect	nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		project vehicle. - No person with a serious health condition affecting driving ability will be allowed to drive. - A proper traffic management plan must be in place and adhered to. - Fuel delivery tankers must not obstruct public roads or pedestrian access during offloading. - Speed limit signs must be visible and adhered to within the site.		
Grievances	Possible grievances from the surrounding community regarding project implementation	- A grievance register must be kept on site and all meeting minutes must be recorded and archived. - Communication regarding project progress and maintenance should be provided to affected parties timeously. - All grievances must be resolved within 7 working days of receipt. - Unresolved grievances must be escalated to the Proponent or relevant authority.	Site Manager, PRO	-Grievance registers on site. -All grievances resolved and recorded. - No outstanding unresolved grievances.

Aspect	Nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
UST Inspection and Leak Testing	Potential fuel leaks from underground storage tanks causing soil and groundwater contamination	- All USTs shall be inspected and leak-tested annually by a qualified technician. - Automatic Tank Gauging (ATG) or equivalent leak detection shall be maintained in working order at all times. - Any anomaly detected shall be investigated and remediated immediately. - Leak test certificates shall be retained on site and submitted to MEFT on request.	Proponent / Site Manager	- Annual UST leak test certificate current and on file. - Zero unresolved UST leak incidents. - ATG system operational at all times.
Separator Pit and Drainage Maintenance	Build-up of hydrocarbons and sludge in separator pit leading to potential overflow and environmental contamination	-The separator pit shall be inspected and cleaned on a minimum quarterly basis. - Accumulated hydrocarbons and sludge shall be removed by a licensed waste contractor and disposed of at an approved facility. - Forecourt drainage channels shall be maintained free of blockages and structural damage. - All maintenance records shall be kept on file.	Site Manager / SHE Officer	- Separator pit cleaning records maintained (minimum quarterly). - Waste disposal manifests on file for all pit cleanings. - No overflow or drainage failure incidents recorded.
Fire Safety and Mechanical Equipment	Risk of fire or explosion due to poorly maintained fire suppression and fuel	- All fire extinguishers shall be inspected monthly and serviced annually by an accredited fire service provider. - Valid service certificates shall be kept on site at all times.	Site Manager / SHE Officer	- Fire extinguisher service certificates current and on file. - Monthly inspection records completed with no outstanding defects.

Aspect	Nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
	dispensing equipment	- Dispensing pumps and vapour recovery equipment shall be serviced per manufacturer specifications. - All service and calibration records shall be maintained in the site environmental file.		- Pump and vapor recovery service logs up to date.
Spill Kit and Containment Infrastructure	Risk of inadequate spill response due to depleted or damaged spill containment equipment and infrastructure	- Spill kits shall be inspected monthly and replenished after each use. - Spill kit locations shall be clearly marked and known to all site staff. - Containment berms, forecourt paving, and tank pit liners shall be visually inspected monthly for cracks and deterioration. - Defects shall be repaired without delay.	SHE Officer / Site Manager	- Monthly spill kit inspection records maintained. - No unrepaired containment defects outstanding at any time. - Spill response records on file for all incidents.
Waste Management (Operational Maintenance)	Generation of hazardous waste (used oils, contaminated absorbents, chemical containers) during routine maintenance activities	- All hazardous waste generated during maintenance shall be segregated, labelled, and stored in a bunded area pending collection. - Waste shall be collected and disposed of by a licensed waste contractor at an approved facility. - Waste disposal manifests shall be retained for a minimum of five (5) years. - No burning of waste shall be permitted on site.	Site Manager / Waste Contractor	- Waste disposal manifests on file for all hazardous waste streams. - No unauthorized waste disposal incidents. - No open burning of waste on site.
UST	Risk of residual	- All fuel product shall be removed from the	Proponent / Qualified Contractor	- Formal written closure notification

Aspect	Nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
Decommissioning (Closure)	hydrocarbon contamination and vapor hazards during removal or abandonment of underground storage tanks at closure	USTs prior to decommissioning. - Tanks shall be cleaned, purged of vapours, and either physically removed or filled in-situ with inert material (concrete slurry or compacted sand) in accordance with applicable SANS standards and MEFT requirements. - All removed tanks, pipework, and contaminated materials shall be disposed of at a licensed hazardous waste facility. - Waste disposal manifests shall be retained for a minimum of five (5) years.		submitted to MEFT at least 60 days before cessation. - UST decommissioning certificate issued by qualified contractor. - Waste disposal manifests on file for all decommissioning waste. - Zero uncontrolled releases during decommissioning.
Soil and Groundwater Assessment (Closure)	Potential residual hydrocarbon contamination of soil and groundwater following cessation of operations	- A closure plan shall be conducted by a qualified environmental professional should operation cease. - Assessment findings and a remediation plan (if contamination is identified) shall be submitted to MEFT. - If contamination is confirmed, soil remediation and/or groundwater treatment shall be implemented. - Verification sampling shall be undertaken and a Closure Verification Report submitted to MEFT for approval before environmental liability is formally discharged. - Avoid discharge of cement and other	Proponent / Environmental Assessment Practitioner (EAP)	- Closure plan submitted to MEFT within agreed timeframe post-closure. - Remediation targets achieved and verified by independent sampling. - Written MEFT confirmation of environmental liability discharge obtained.

Aspect	Nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		pollutants.		
Site Rehabilitation (Closure)	Potential visual, ecological, and land-use impacts from abandoned infrastructure, hard standing surfaces, and disturbed soil at site closure	- All structures, canopy, forecourt hard standing, and ancillary buildings shall be demolished and removed from site (unless alternative use approved by authorities). - The site shall be re-graded and re-vegetated using indigenous plant species suited to the Kunene Region environment. - A Rehabilitation Plan, including a vegetation re-establishment programme, shall be submitted to MEFT for approval prior to commencement. - Post-rehabilitation monitoring shall be undertaken at 6-month intervals for a minimum of two (2) years. - A Final Closure Audit Report shall be submitted to MEFT upon completion of rehabilitation.	Proponent / EAP / Site Manager	- Rehabilitation Plan approved by MEFT prior to commencement. - Vegetation re-establishment success monitored and documented at 6-month intervals. - Final Closure Audit Report submitted and accepted by MEFT. - No outstanding environmental liabilities at closure.
Stakeholder Engagement and Grievances (Closure)	Community and stakeholder concerns arising from service station closure, decommissioning activities, and site rehabilitation	- The Proponent shall notify all relevant stakeholders in writing prior to commencement of closure activities. - A grievance mechanism shall remain in place and accessible throughout the entire closure and rehabilitation period. - All grievances received shall be recorded in the grievance register and responded to within 7 working days.	Proponent / PRO / Site Manager	- Written stakeholder notification issued prior to closure activities. - Grievance register maintained and up to date throughout closure period. - All grievances resolved within 7 working days. - No outstanding unresolved grievances at closure completion.

Aspect	Nature	Management and Mitigation Measure(s)	Responsible Person	Key Performance Indicator (KPI)
		- Unresolved grievances shall be escalated to the Proponent or relevant authority.		

3 ENVIRONMENTAL AUDITING

3.1 Project Activity Summary and Compliance Audit

The service station has been in operation since 1987. Therefore, this audit assessment and EMP update cover the entire operational period, as no audits were conducted during the facility's existence.

EDS has performed an Environmental Site Audit, in conformance with the Scope of Work developed in cooperation with the client and the provisions of EMA 7 of 2007.

Site observation details are presented in Appendix A.

3.2 Purpose of the Assessment

Excel Dynamic Solutions Pty Ltd (EDS) has performed a Phase I Environmental Site Audit (“ESA”) of the Commercial fuel retail facility in Okamatapati, in the Otjozondjupa Region. EDS was authorized by Northern Fuel Distributors cc to perform this work in February 2026.

This EMP has been performed by an independent environmental professional, as required under the Environmental Management Act, No. 7 of 2007.

3.3 Special Terms and Reliance

It is EDS's understanding that this report is to be used and distributed exclusively for purposes of obtaining the Environmental Clearance Certificate. This report of findings was prepared for the exclusive use of Northern Fuel Distributors cc, its contractors, and competent government bodies, such as the Ministry of Environment, Forestry and Tourism (MEFT) and the Ministry of Industries, Mines and Energy (MIME). The contents of this report may not be copied, provided or otherwise communicated to any party other than those associated with Northern Fuel Distributors cc and without the express written consent of Northern Fuel Distributors cc.

3.4 Significant Assumptions

The following assumptions are made by EDS in this report. EDS relied on information derived from secondary sources, including the project coordinator, governmental agencies, the Client (Coordinator), designated representatives of the Client and personal interviews. Except as set forth in this report, EDS has made no independent investigation into the accuracy and completeness of the information derived from secondary sources, including government agencies, the Client, designated representatives of the Client, and fuel retail facility personal interviews, and has assumed that such information is accurate and complete. EDS assumes information provided by or obtained from the client is accurate and complete. EDS assumes that the Client Coordinator and Client representatives, including the Site Manager, used good faith in answering questions and obtaining information regarding the subject fuel retail facility. This would also include obtaining the relevant documents from previous consultants.

Table 2: Environmental Audit Table

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommend a tion
EMP availability	Employees appointed for operation and maintenance on the respective site must ensure that all personnel have access to a copy of the EMP.	Fuel Retail Facility have no ECC, hence no EMP has been drafted yet.	**NON-COMPLIANT**	Environmental Coordinator/Proponent to ensure a copy of the updated EMP is made available at the Property.
EMP training	Employees appointed to operation and maintenance on the respective site must ensure that all personnel are aware of the health, safety, and environmental considerations applicable to their work.	Personnel on the site have been informed of all the OHS&E issues	**NON-COMPLIANT**	Environmental Coordinator/Proponent to ensure Property employees and contractors are afforded trainin g opportunities on the updated EMP.
Employment and skills transfer	Provision of employment to residents of Okamatapati Okamatapati	Employment of residents is prioritized	**COMPLIANT**	N/A

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Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
Visual Impacts (sense of place)	All the necessary options to improve the aesthetic of the site should be considered and incorporated into the activities of the operation of the facility.	The site is kept tidy and shows consideration of the natural aesthetic of the site, and conforms to the standard industrial set up of the neighbourhood.	**COMPLIANT**	N/A
Ecological Impact	All the necessary options to preserve the natural ecological settings	Due to the nature of the operation, their environment is not in the natural state. No fauna on site, but there is some visible flora close to the site.	**COMPLIANT**	N/A
Air Quality	All venting systems and procedures have to be designed according to SANS standards.		**NON-COMPLIANT**	All venting systems and procedures should be designed to latests SANS standards.

hydrocarbon vapours are released during delivery due to incomplete containment of fuel and venting of tanker's compartments. Vapours can also be released during the filling of road tankers.				
Waste Generation	Contaminated fuel products that can no longer be used in the market must be disposed of in the hazardous waste section of a municipal dump, or, where possible, transferred to waste oil recycling facilities.	Hazardous waste is collected and removed from the site regularly.	**COMPLIANT**	N/A
	All other domestic waste should be disposed of timeously to maintain visual orderliness, but more importantly, to avoid liquid waste entering the soil substrate		**COMPLIANT**	N/A

	Contaminated soil can be remediated in accordance with accepted procedures at a site dedicated to this purpose.		**COMPLIANT**	N/A
	Liaise with the Municipality regarding waste management and hazardous waste handling.		**NON-COMPLIANT**	N/A
	A register of hazardous waste disposal should be kept. This should include the type of waste, volume, as well as the disposal method/facility.		**NON-COMPLIANT**	N/A
Health and Safety	Implementation of a health and safety management system will reduce health and safety related risks. Typical mitigating measures within the health and safety management systems are: • Job hazard analysis • Operational and procedural manuals • NEBOSH (or equivalent) certified Health and Safety training of staff • Regular inspections and maintenance of all safety equipment and structures	Implemented. A bi-annual report of all incidents reported is compiled, including inspection and maintenance dates of equipment and structures. Health and Safety Training is conducted	**NON-COMPLIANT**	Workers did not receive training on how to use first aid kits or fire extinguishers.

	• Implement housekeeping rules • Colour coding areas, pipes, equipment and substances • Signage for Personal Protective Equipment (PPE) (e.g. protective clothing like safety boots and hard hats) • Safe work procedures and permits to work • Clearance certificates for confined spaces • Emergency response plans • Regular reviews of Material Safety Data Sheets (MSDS) in training • First aid training of supervisors and volunteering staff and treatment • Medical procedures and emergency services must be available on site or close by • Daily safety moments and/or drills • Protective equipment e.g. handrails			

	on top of rail or road tankers • Implement regulations for handling fuel			

Noise	The World Health Organisation (WHO) Guidelines for Community Noise Levels (1999) must be followed to prevent hearing impairment. Noise levels in industrial areas are limited to an average of 70 dB over a 24-hour period, with maximum noise levels not exceeding 110 dB during the period. All noise complaints and additional data must be included in the health and safety report.	A bi-annual report of all incidents reported is compiled, including inspection and maintenance dates of equipment and structures.	**NON-COMPLIANT**	N/A
Groundwater Contamination	Spill control structures and procedures must be in place in accordance with SANS 089-1 and SANS 089-3, or better, including impounding around loading areas by bunding with appropriate slopes of 1:100.		**NON-COMPLIANT**	-Spill control structures procedure should be according to SANS 089-1 and SANS 089-3, or better methods.
	All fuelling should be carried out on surfaces provided for this purpose—E.g. Concrete slabs with regularly maintained seals between slabs.		**NON-COMPLIANT**	Concretrete slabs should be installed with drainage and water separator chamber.
	The procedures followed to prevent environmental damage during service and maintenance, and compliance with these procedures, including the correct use of		**NON-COMPLIANT**	N/A

	sumps and regular reporting of spillages, must be audited and corrections made where necessary.			
	Proper training of operators must be conducted on a regular basis.		**PARTIALLY-COMPLIANT**	N/A
	Any spillage of more than 200 litre must be reported as per the Petroleum Products License. Spill clean-up kit must be available on site as per the relevant Material Safety Data Sheets		**NON-COMPLIANT**	-Ensure Spill clean-up kit are be available on site as per the relevant Material Safety Data Sheets. -Report and document all Spillages.
Fire and Explosion Hazard	***Safe Offloading/Loading Procedures must be followed:*** • Coupling of hoses should be tight and old perished materials should be replaced before leaks occur.		**PARTIALLY-COMPLIANT**	N/A

	Safe Handling Procedures must be followed: • Use non-sparking tools and explosion-proof equipment. Use in well-ventilated area away from all ignition sources. • Keep product away from high-energy ignition sources, heat, sparks, pilot lights, static electricity, and open flames.		**COMPLIANT**	N/A
	All liquid hydrocarbon storage containers should be grounded and bonded. Products must be stored where they are not affected by heat.		**COMPLIANT**	N/A
	Storage and Handling Procedures must be followed: • Electrical equipment and fittings must comply with local fire prevention regulations for this class of product. Refer to national or local regulations covering safety at petroleum handling and storage areas for this product.		**PARTIALLY COMPLIANT**	N/A

	• Emergency training and an emergency drill program must be implemented to be given at least every 6 months on Emergency Procedures.			
	Fire Fighting and Fire Prevention: • All fire precautions and fire control at the site must be in accordance with SANS 089-1, or better. Firefighting measures, as per the Material Safety Data Sheets of the product, should be adhered to. • All personnel must be sensitized about responsible fire protection measures and good housekeeping such as the removal of flammable materials (e.g. rubbish, dry vegetation, and hydrocarbon-soaked soil) from the vicinity of the installation. Regular inspections should be carried out to check for these materials at the site. • All fuel storage and handling facilities in Namibia must comply with strict safety distances as prescribed by SANS. • There must be sufficient water		**COMPLIANT**	N/A

	available for firefighting purposes, as according to the SANS 089-1 specifications. • A holistic fire protection and prevention plan, including an emergency response plan a firefighting plan and a spill recovery plan is needed.			
	• Regular surveys of the fire-fighting equipment and water supply should be conducted. • The operations must have an integrated fire prevention plan, which considers the regulations stipulated in sections 47 and 48 of the Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990).			
Traffic	Uploading of fuel should remain within the working hours as agreed upon in writing for operations of the facility, in order to limit traffic congestion.		**COMPLIANT**	N/A
	An efficient fuel uploading schedule must be implemented.		**COMPLIANT**	N/A

Security	Fitness for work certificates for all security officers must be issued monthly. Daily alcohol testing should be conducted by an authorised person at the start and end of each shift.		**PARTIALLY COMPLIANT**	N/A
Waste production	All re-usable pipelines, pumps, tanks, valves and other equipment must be removed to another site or sold. Those that can be reused must be scrapped properly. Any items that cannot be reused must be scrapped appropriately. Upon demolition of buildings and concrete, the rubble must be removed from the property and taken to an approved dumpsite. Rehabilitation, if necessary, is to be done using funds designated for the purpose.		**COMPLIANT**	N/A

Ecological Impact	Dismantling and removal of any structure should not affect any faunal or floral habitats formed during operation, or any organism that has become dependent on those structures for survival, shelter or breeding.	.	**PARTIALLY COMPLIANT**	N/A
	The feasibility of relocating fauna or flora must be addressed. Should the species be listed as vulnerable to extinction, the MEFT must be contacted in order to determine the appropriate handling of the situation and determine the proper course of action.		**COMPLIANT**	N/A
Employment	Have a plan in advance for meeting the Labour Act's requirements, in the case where the Proponent is considering the retrenchment of staff. Where possible, staff can be relocated to another facility or town where business can continue as usual.		**PARTIALLY COMPLIANT**	N/A

Dust generation	Regular dust suppression should be included in the Decommissioning Plan for cases of excessive dust. Personnel should be issued dust masks for health and safety. time. Accumulated rubble that may cause dust must be taken to the dumpsite within a reasonable timeframe.		**NON-COMPLIANT**	N/A
Noise	The World Health Organization (WHO) guideline on maximum noise levels (Guidelines for Community Noise, 1999) to prevent hearing impairment can be followed during the decommissioning phase.		**PARTIALLY COMPLIANT**	N/A
Visual Impact	Visual impacts could be limited by keeping All decommissioned areas must be kept clean and orderly at all times. Good housekeeping also reduces the risk of injuries		**PARTIALLY COMPLIANT**	N/A

	Notice of the commencement of decommissioning should be given to the local authorities, with an invitation to provide feedback at any time on the visual impact.	The project has not reached this stage	**COMPLIANT**	N/A
	Avoid combining hazardous and non-hazardous waste by providing separate waste containers (bins) for hazardous and domestic/general waste.	The project has not reached this stage	**COMPLIANT**	N/A
Surface and groundwater contamination	Pollutants in soil and building rubble must be transported away from the site to an approved, appropriately classified waste disposal site. Confirm MSDS information of any remaining fuels, oils or lubricants that must be discarded.	The project has not reached this stage	**COMPLIANT**	N/A

	Regulations on sewerage discharge and on the chemicals that may or may not be discharged into the sewerage system must be followed.			
Health, Safety and Security	Adequate health and safety measures must be included in the decommissioning plan to ensure the safety of staff on site, and include: • Proper training of operators. • First aid treatment; • Medical assistance; • Emergency treatment; • Prevention of inhalation of fumes (fuel); • Protective clothing, footwear, gloves and belts; safety goggles and masks; • Manuals and training regarding the correct handling of materials should be in place and updated as new or updated material safety data sheets become available; Risks might be lower, but still exist, especially if tanks must be entered for		**PARTIALLY-COMPLIANT**	N/A

	inspections. Confined space training will be required. • 24-hour security surveillance in case of opportunistic activities.			
Fire and Explosion Hazard	All relevant regulations and precautions should be in place, as they were during the Operational Phase. All personnel have to be sensitized about responsible fire protection measures and good housekeeping. Regular inspections and tests should continue to be conducted of firefighting equipment and pollution-control materials at the fuel storage facility. All fire precautions and fire control at the fuel storage facility must comply with SANS or better.		**PARTIALLY COMPLIANT**	

	The holistic fire protection and prevention plan should still be utilized.			

4 CONCLUSION AND RECOMMENDATIONS

The minor non-compliances identified in this Environmental Site Audit Report require corrective action to ensure the continued environmentally responsible operation of the Okamatapati Service Station.

Recommendations for corrective action are as follows:

- Provide a copy of the updated Environmental Management Plan (EMP) and conduct follow-up training for all relevant employees and stakeholders on the contents and implementation of the EMP.
- Implement a penalty system for EMP non-compliance to enforce accountability and strengthen environmental management practices within the fuel retail facility operations.

The potential positive and negative impacts associated with the fuel storage activities were identified and assessed, and appropriate mitigation measures have been implemented. These mitigation measures must be adhered to at all times. Most importantly, monitoring of the environmental components described in the Environmental Management Plan should be conducted by the Proponent, together with an appointed Environmental Officer and/or the relevant Competent Authority.

Continued implementation of the recommended corrective actions, together with regular environmental monitoring and periodic audits, will contribute to improved environmental performance and sustained compliance with applicable environmental legislation and standards. Commitment to proactive environmental management practices will further support the sustainable operation of the facility while minimizing potential environmental risks associated with fuel retail activities.


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