# THE ENVIRONMENTAL MANAGEMENT PLANNING (EMP) FOR AN EXISTING FUEL DEPOT IN OTJIWARONGO IN THE OTJOZONDJUPA REGION

## TO SUPPORT AN

## APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC)

## Version: Final

## APP:006775


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# 1 INTRODUCTION

## 1.1 Project Background

This environmental management plan report is prepared on behalf of the Northern Fuel Distributors cc (hereinafter referred to as *the Proponent*). Northern Fuel Distributors CC 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 Proponent plans to continue operating a Fuel Depot at Erven 1051 in Otjiwarongo, in the Otjozondjupa Region. The Depot has existed for an unknown period (Nardus Brits, pers. comm.). The Depot locality map and layout are shown in Figures 1 and 2.

The environmental management plan report summarizes the fuel depot facility's environmental performance. The audit report is prepared as per the requirements of the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 gazetted under the Environmental Management Act (EMA), 2007, (Act No. 7 of 2007).

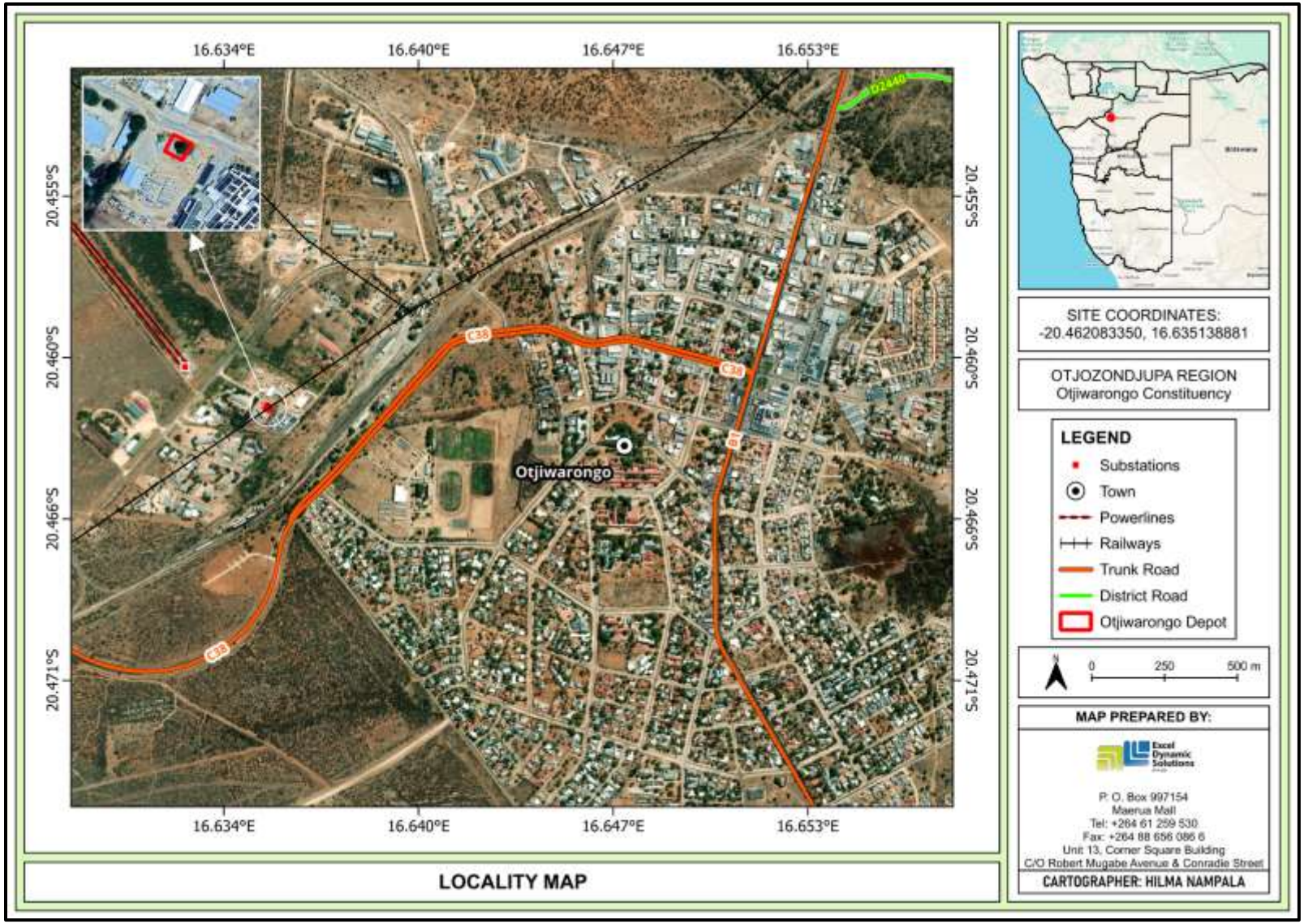


**Figure 1: Location of the fuel depot in Otjiwarongo**


**Figure 2: Site layout (Source: Northern Fuel Distributors CC, 2025)**

## 1.2 Purpose of the updated Environmental Management Plan Report

An Environmental Management Plan Report links the impacts identified in the EIA Process to the required environmental management measures and preparedness responses on the ground during project implementation and operation, as assessed during compliance monitoring.

The compilation of this updated Environmental Management Plan and/or Audit Report is one of the requirements (scope of work) presented to EDS by Northern Fuel Distributors cc, to ensure environmental compliance with reference to the Environmental Management Plan (EMP), which was prepared as a legal requirement by Section 8 of the Environmental Management Act (EMA), No.7 of 2007 and its 2012 Environmental Impact Assessment (EIA) Regulations.

The Report documents the progress made in environmental compliance for the fuel storage facility's operations. The phases of the project are summarised below:

- **Operation and maintenance -** This is the phase during operation where the Proponent carries out filling of fuels into the tanks, storage of fuel, transportation of the fuel from the site 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 depot cease. The decommissioning of operations may be considered once the need for the fuel depot facility diminishes. During the operational phase and before decommissioning, the Proponent will need to implement site rehabilitation measures.

It is expected of Northern Fuel Distributors cc and its employees and/or contractors that they guide operations on site to ensure that impacts on the environment are avoided or, if unavoidable, limited.

## 1.3 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 authorisation for operations at the Fuel Depot, to perform environmental monitoring and auditing, and to produce an updated EMP and environmental compliance report for the proponent. The audit period is November 2025 – May 2026.

Mr Mandume Leonard compiled this document.

# 2 EMP ROLES AND RESPONSIBILITIES

As the ECC holder, the Proponent is ultimately responsible for implementing the updated EMP and has delegated responsibility for its effective implementation to Excel Dynamic Solutions (Pty) Ltd for the time period covered by this audit.

## 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 in the EIA carried out for the prospecting and exploration activities were based on the three project phases listed below:

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

The responsible persons at Northern Fuel Distributors cc 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**.

# 3 ENVIRONMENTAL AUDIT

## 3.1 Project Activity Summary and Compliance Audit

The Fuel Depot is currently equipped with 12 x 83000 litres tanks. Caltex/BP initially operated the Depot for many years, and the exact commencement date is unknown to the current operator (Nardus Brits, Northern Fuel Distributor CC, pers. comm.). 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. This assessment has found no evidence of Recognised Environmental Conditions (RECs) associated with the facility.

Site observation details are presented in **Appendix A**.

## 3.2. Management Action Plan: Operation (and Maintenance) Phase

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

**Table 1: Audit on Management Action Plan for the Operation and Maintenance Phase**

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| **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. | Personnel on the site have been informed of all the OHS&E issues in the EMP. | **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 training opportunities on the updated EMP. |
| **Employment and skills transfer** | Provision of employment to residents of Otjiwarongo | Employment of residents is prioritised | **COMPLIANT** | N/A |

| 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 on site. | **COMPLIANT** | N/A |
| **Air Quality** | All venting systems and procedures have to be designed according to SANS standards | Vapour emissions are minimal and site specific and pose a limited threat to personnel on site. | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| 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 tomaintain visual orderliness, but more importantly, to avoid liquid waste entering the soil substrate | | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| | 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. | | **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. | | **COMPLIANT** | N/A |
| | Any complaints received regarding waste should be recorded with notes onaction taken | | **COMPLIANT** | N/A |
| **Health and Safety** | Implementation of a health and safety management systemwill reduce health and safety related risks.<br>Typical mitigating measures within the health and safetymanagement systems are: -<br>• Job hazard analysis<br>• Operational and procedural manuals<br>• NEBOSH (or equivalent) certified Health and Safetytraining of staff<br>• Regular inspections and maintenance of all safety equipment and structures | Implemented.<br>A bi-annual report of all incidents reported is compiled, including inspection and maintenance dates of equipment and structures .<br>Health and Safety Training is conducted | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| | • Implement housekeeping rules<br>• Colour coding areas, pipes, equipment and substances<br>• Signage for Personal Protective Equipment (PPE) (e.g. protective clothing like safety boots and hard hats)<br>• Safe work procedures and permits to work<br>• Clearance certificates for confined spaces<br>• Emergency response plans<br>• Regular reviews of Material Safety Data Sheets(MSDS) in training<br>• First aid training of supervisors and volunteering staff andtreatment<br>• Medical procedures and emergency services must beavailable on site or close by<br>• Daily safety moments and/or drills<br>• Protective equipment e.g. handrails on top of rail orroad tankers<br>• Implement regulations for handling fuel | | | |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| **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.<br>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. | **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. | | **COMPLIANT** | N/A |
| | All fuelling should be carried out on surfaces provided for this purpose—E.g. Concrete slabs with regularly maintained seals between slabs. | | **COMPLIANT** | N/A |
| | The procedures followed to prevent environmental damage during service and maintenance, and compliance with these procedures, including the correct use of sumps and regular reporting of spillages, must | | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| | be audited and corrections made where necessary. | | | |
| | Proper training of operators must be conducted on a regular basis. | | **COMPLIANT** | N/A |
| | Any spillage of more than 200 litre must be reported as per the Petroleum Products License.<br><br>Spill clean-up kit must be available on site as per the relevant Material Safety Data Sheets | | **COMPLIANT** | N/A |
| | Contingencies for the changes in pressure and temperature between Otjiwarongo and the destination must be in place when filling tankers in Otjiwarongo.<br><br>Avoid overfilling of tanks in Otjiwarongo<br><br>Position tankers over bunded areas to prevent soil contamination, especially during rainy season to prevent runoff to nearby drainage systems or infiltration towards the water table. | | **COMPLIANT** | N/A |
| **Fire and Explosion Hazard** | ***Safe Offloading/Loading Procedures must be followed:***<br><br>• No locomotives may enter the rail gantry – fire risk. | | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| | • Coupling of hoses should be tight and old perished materials should be replaced before leaks occur.<br>• Rail tanks should not be overfilled in Otjiwarongo as the changes in pressure and temperature may cause leakages at the release valves on top of the tankers. | | | |
| | ***Safe Handling Procedures must be followed:***<br>• Use non-sparking tools and explosion-proof equipment. Use in well-ventilated area away from all ignition sources.<br>• 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.<br>Products must be stored where they are not affected by heat. | | **COMPLIANT** | N/A |
| | ***Storage and Handling Procedures must be followed:*** | | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| | • 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<br>• 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:***<br>• 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.<br>• All personnel must be sensitised 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.<br>• All fuel storage and handling facilities in Namibia must comply with strict safety distances as prescribed by SANS. | | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| | • There must be sufficient water available for firefighting purposes, as according to the SANS 089-1 specifications<br>• A holistic fire protection and prevention plan, including an emergency response plan, a firefighting plan and a spill recovery plan is needed.<br>• Regular surveys of the fire-fighting equipment and water supply should be conducted.<br>• 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** | Strict security at entry points to prevent unauthorised entry into the facility must be in place.<br><br>'Fitness for work' certificates for every security officer are to be issued every month. Daily alcohol testing should be conducted by an authorised person at the start and end of each | | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions | Observations | Compliance comment | Corrective Action/Recommendation |
|---|---|---|---|---|
| | shift. | | | |
| **Terrorism** | A comprehensive emergency plan is communicated to all staff and relevant outside institutional bodies. Scheduled drills must include all stakeholders.<br><br>Suspicious persons, vehicles and activities should be noted and approached with caution. | | **COMPLIANT** | N/A |

## 3.3 Management Action Plan: Decommissioning Phase

**Table 4: Management action plans for the Decommissioning Phase**

| Environmental Feature | Management Actions/Monitoring Objectives | Observation | Compliance | Recommended Action |
|---|---|---|---|---|
| **Waste production** | All re-usable pipelines, pumps, tanks, valves and other equipment must be removed to another site or sold.<br>manner. Those that can be reused must be scrapped properly. Any items that cannot be reused must be scrapped appropriately.<br>Upon demolition of buildings and concrete, the rubble must be removed from the property and taken to an approved dumpsite designated by the Otjiwarongo Municipality.<br>Rehabilitation, if necessary, is to be done using funds designated for the purpose. | The project has not reached this stage | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions/Monitoring Objectives | Observation | Compliance | Recommended Action |
|---|---|---|---|---|
| **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. | . The project has not reached this stage. | **COMPLIANT** | N/A |
| | The and 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.<br>Where possible, staff can be relocated to another facility or town where business can continue as usual. | The project has not reached this stage | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions/Monitoring Objectives | Observation | Compliance | Recommended Action |
|---|---|---|---|---|
| **Dust generation** | Regular dust suppression should be included in the Decommissioning Plan for cases of excessive dust.<br>Personnel should be issued dust masks for health and safety.<br>The Accumulated rubble that may cause dust must be taken to the dumpsite within a reasonable timeframe. | The project has not reached this stage. | **COMPLIANT** | N/A |
| **Noise** | The World Health Organization (WHO) guideline on maximum noise levels (Guidelines for Community Noise, 1999) to prevent hearing impairmentcan be followed during the decommissioning phase. | The project has not reached this stage | **COMPLIANT** | N/A |
| **Visual Impact** | Visual impacts could be limited by keeping<br>All decommissioned areas are clean and orderly at all times. Good housekeeping also reduces the risk of injuries | The project has not reached this stage | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions/Monitoring Objectives | Observation | Compliance | Recommended Action |
|---|---|---|---|---|
| | 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.<br><br>Confirm MSDS information of any remaining fuels, oils or lubricants that must be discarded. | The project has not reached this stage | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions/Monitoring Objectives | Observation | Compliance | Recommended Action |
|---|---|---|---|---|
| | 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:<br>• Proper training of operators;<br>• First aid treatment;<br>• Medical assistance;<br>• Emergency treatment;<br>• Prevention of inhalation of fumes (fuel);<br>• Protective clothing, footwear, gloves and belts; safety goggles and masks;<br>• 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 tanksmust be entered for | The project has not reached this stage | **COMPLIANT** | N/A |

| Environmental Feature | Management Actions/Monitoring Objectives | Observation | Compliance | Recommended Action |
|---|---|---|---|---|
| | inspections. Confined space training will be required.<br>• 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.<br>All personnel have to be sensitised about responsible fire protection measures and good housekeeping.<br>Regular inspections and tests should continue to be conducted of firefighting equipment and pollution-control materials at the fuel storage facility.<br>All fire precautions and fire control at the fuelstorage facility must comply with SANS or better. | The project has not reached this stage | **COMPLIANT** | |

| Environmental Feature | Management Actions/Monitoring Objectives | Observation | Compliance | Recommended Action |
|---|---|---|---|---|
| | The holistic fire protection and prevention plan should still be utilised. | | | |

**SUMMARY OF COMPLIANCE**

This environmental audit has identified 24 management actions. After on site observation, two (2) out of the 24 management actions have been identified as ***Non-Compliant***. Twenty-two (22) of the management actions were observed as ***Compliant***. All 18 monitoring actions were identified as ***Compliant***. The large proportion of *Compliant* actions recorded for the environmental site audit therefore indicates that the Proponent is generally Compliant with the project's management and monitoring action plans.

Northern Fuel Distributors cc has, to date, paid attention to the project's environmental aspects and compliance. There were no serious issues of Non-Compliance identified during this Environmental Audit.

The 2 non-compliances may be treated as a single issue, requiring a single solution/intervention. The identified issue has, to date, had no significant negative effects on fuel depot operations, employees, or the environment and is therefore regarded as minor. The issue of Partial Compliance identified is:

***1. Absence of the EMP copy on site and training of employees on its content, which needs to be done by a qualified environmental professional.***

Although considered minor at this stage, training of employees and readily access to a copy of the EMP will be relevant in the cases of observed irresponsible and/or unsustainable activity in the environment.

# 4 CONCLUSION AND RECOMMENDATIONS

The minor non-compliances identified in this environmental site audit report require corrective action to ensure the operations of Northern Fuel Distributors cc's fuel depot achieve a 100% Compliance rate. The assessment has found no evidence of HRECs associated with the facility. Recommendations for corrective action are as follows:

- Provide a copy of the updated EMP and follow up with training of all involved employees and stakeholders on the EMP content
- Implement a penalty system for EMP Compliance to enforce accountability towards environmental management within the fuel depot facility operations.

The potential positive and negative impacts of the fuel storage activities were identified, assessed, and mitigation measures were implemented. Mitigation measures need to 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 and an appointed Environmental Officer or any applicable Competent Authority.

The next site inspection will be undertaken in May 2026, and a resultant biannual report will be produced thereafter.

**APPENDIX A ENVIRONMENTAL SITE VISIT AUDIT AND INTERVIEW REPORT**



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**November 2025**

## 1 EXECUTIVE SUMMARY

Excel Dynamic Solutions Pty Ltd (EDS) has performed a Phase I Environmental Site Audit ("ESA") of the Fuel Depot in Otjiwarongo in the Otjozondjupa Region. EDS was authorised to perform this work in November 2025 by Northern Fuel Distributors cc. The ESA was conducted in accordance with the scope and limitations of the Environmental Management Act No. 7 of 2007 and the EIA Regulations of 2012, the Petroleum Products and Energy Act of 1990 and its regulations, and the South African National Standard (SANS) 10089. An independent, qualified environmental professional has prepared this ESA.

The Fuel Depot comprises buildings that include a reception area, kitchen, toilets, and offices. The remainder of the facility area contains aboveground fuel storage tanks, water tank, fire extinguishers, fire hydrants for emergency control, product pipelines, and a control room for monitoring and controlling product movement. The offloading areas have drainage pits connected to the separator pit for wastewater collection. The stored fuel consists of 50 ppm diesel and unleaded petrol (ULP).


WATER


**Figure 3 Some of the fuel depot areas**

### *1.1 Summary of the findings of the audit of the fuel depot facility*

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. This assessment has revealed no evidence of Recognized Environmental Conditions (RECs) in connection with the fuel depot.

A deminimis condition is a condition that generally does not present a threat to human health or the environment, and that typically would not be the subject of an enforcement action if brought to the attention of appropriate governmental competent bodies. This assessment has revealed no evidence of de minimis conditions.

A historical recognized environmental condition (HREC) refers to an environmental condition which would have been considered a REC in the past, but which is no longer considered a REC based on subsequent assessment and/or remediation of any contaminants to below the most restrictive (generally residential) cleanup target concentrations or regulatory closure with no formal or implied restricted uses. The assessment has revealed no evidence of HRECs in connection with the fuel depot.

### *1.2 Recommendations and Conclusions*

Based on the information provided in this report, EDS recommends that no further action be required at the fuel depot and that the MEFT grand the Environmental Clearance Certificate (ECC).

## 2. INTRODUCTION

### *2.1 Purpose of the Assessment*

Excel Dynamic Solutions Pty Ltd (EDS) has performed a Phase I Environmental Site Audit (“ESA”) of the Commercial fuel depot in Otjiwarongo in the Otjozondjupa Region. EDS was authorised by Northern Fuel Distributors cc to perform this work in November 2025.

This ESA has been performed by an independent environmental professional, as required under the Environmental Management Act, No. 7 of 2007. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report. The location of the Subject fuel depot and surrounding properties is shown in **Figure 1**.

The purpose of the ESA is to identify Recognised Environmental Conditions (RECs), Controlled Recognised Environmental Conditions (CRECs), Historical Recognised Environmental Conditions (HRECs), and de minimis conditions associated with petroleum products, as stipulated in the EMA of 2007.

The term REC is defined as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at the fuel depot: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

The term CREC is defined as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.”

The term HREC is defined as “a past release of any hazardous substances or petroleum products that has occurred in connection with the fuel depot facility and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the fuel depot facility to any required controls.”

The term de minimis condition is defined as “a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not RECs nor CRECs.”

The term Business Environmental Risk (BER) refers to environmental risk considerations that do not meet the threshold for a REC but that EDS believes should be brought to the Proponent's attention and addressed during this assessment.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required.

*2.2 Special Terms and Reliance*

It is EDS's understanding that this report is to be used and distributed exclusively for purposes of obtaining the ECC. 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 Mines and Energy (MME). 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.

*2.3 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 depot 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 depot facility. This would also include obtaining the relevant documents from previous consultants. EDS also assumes the Client will designate appropriate and knowledgeable people for performance of the Phase II Environmental Assessment including the Site Managers if required in the future.

## 3. SITE LOCATION

### *3.1 Subject fuel depot facility*

The fuel depot is located in Otjiwarongo, in the Otjozondjupa Region.

## 4. PHYSICAL SETTING

### *4.1 General Topographic Setting*

The elevation of the project area is 1335 meters above sea level, and the surface is relatively flat.

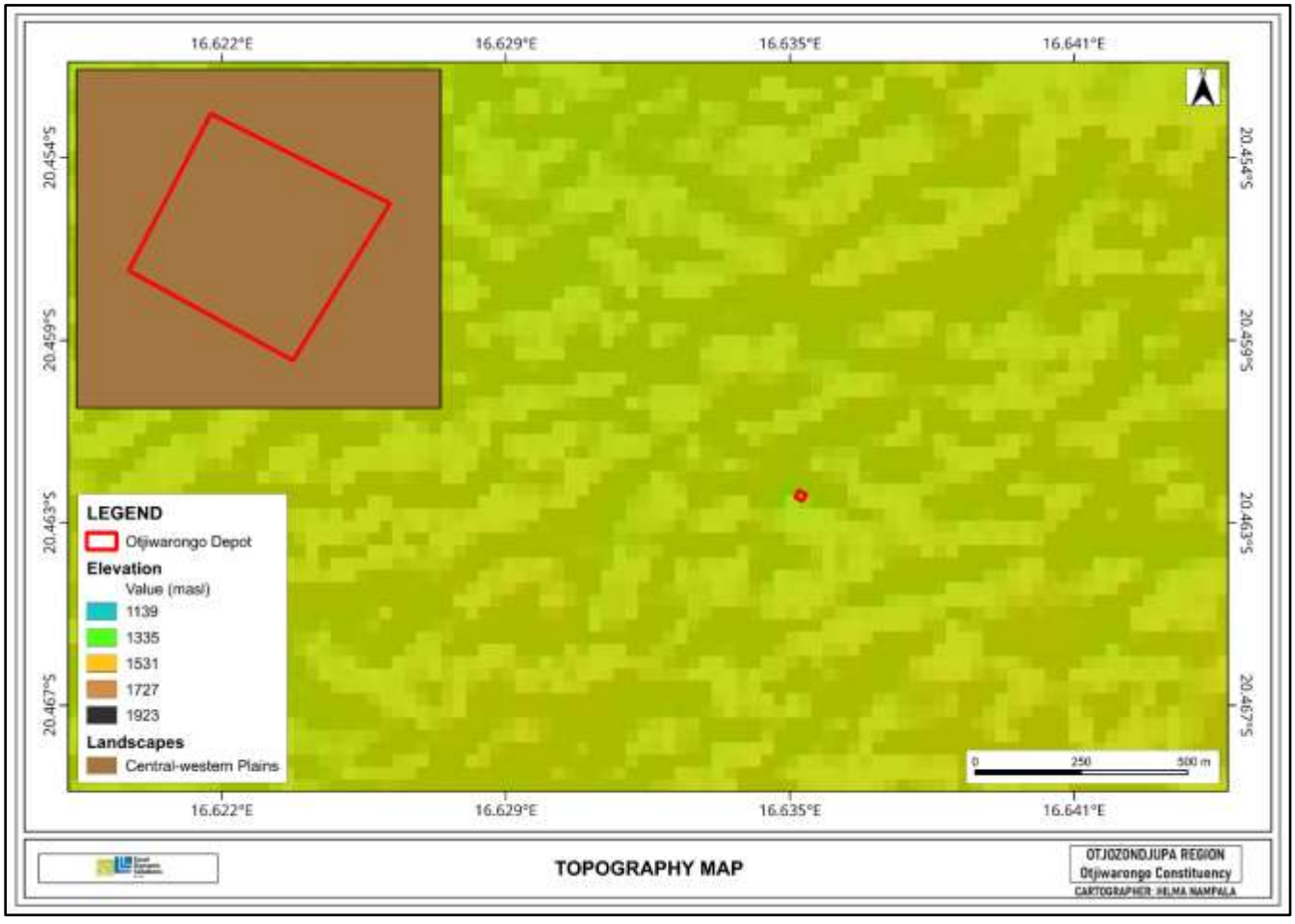


**Figure 4: The general topography of the project area**

*4.2 Surface Water and Groundwater*

The Region is home to many ephemeral river systems.  Near the project area there are no rivers, but there is a borehole near by the fuel depot.

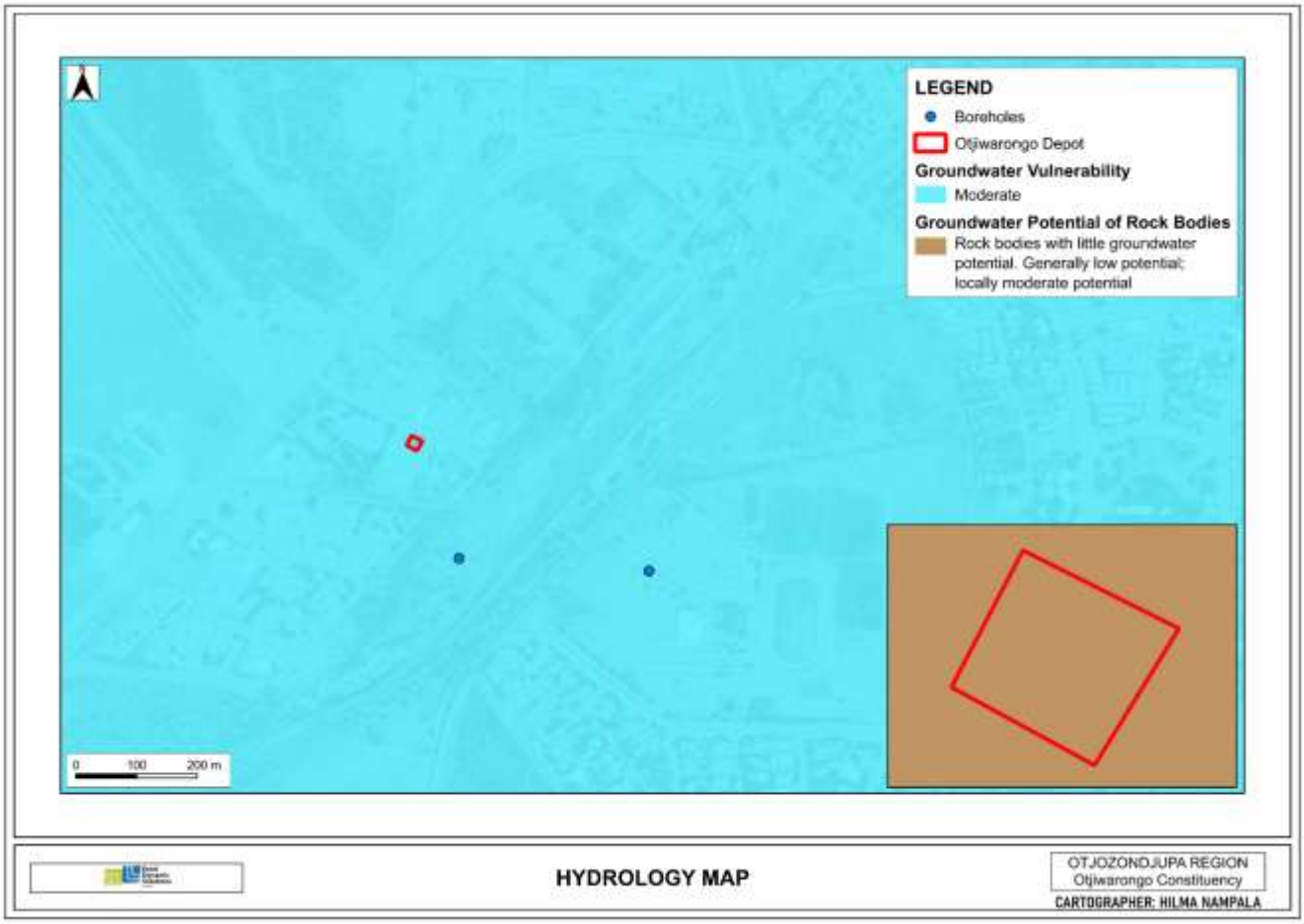


**Figure 5: The hydrological map of the project area**

*4.3 Soils*

The Otjiwarongo (project area) soils are classified as Eutric Regosols.  The Regosols are shallow, rocky soils. The soil layer is very shallow and often overlies rock or contains a high proportion of gravel and stones. This happens where erosion (wind/rain) removes soil faster than new soil forms.

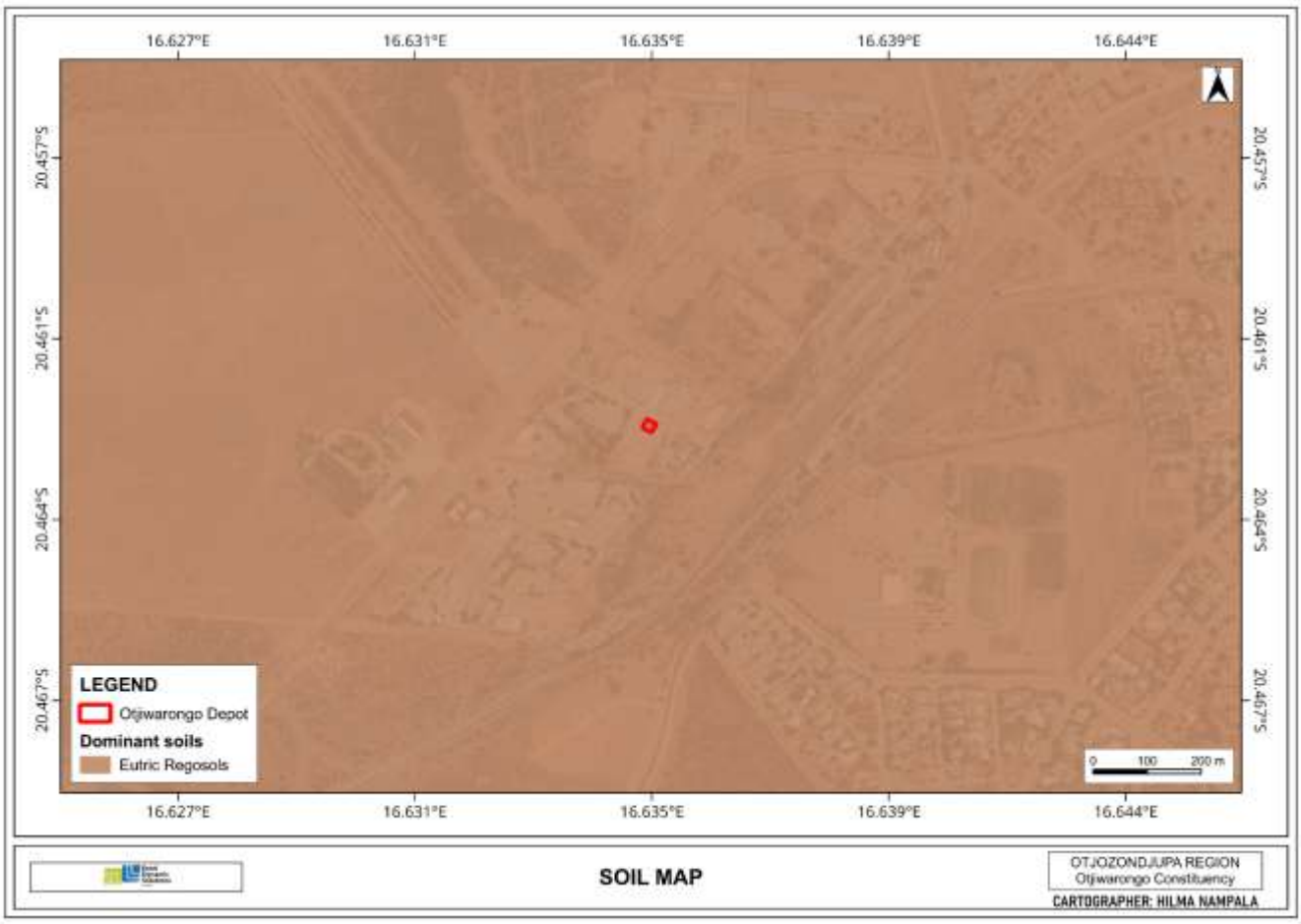


**Figure 6: the soil types found within and on the surrounding of the project area**

*4.4 Geology*

The geology of the project area is dominated by the central Namibian plateau, underlain mainly by old continental crustal rocks and sediments typical of central Namibia. The wider Otjozondjupa Region is part of the Damara Supergroup with a mix of metamorphic rocks (like schists and gneisses) and sedimentary rocks (sandstone, limestone, and dolomite)

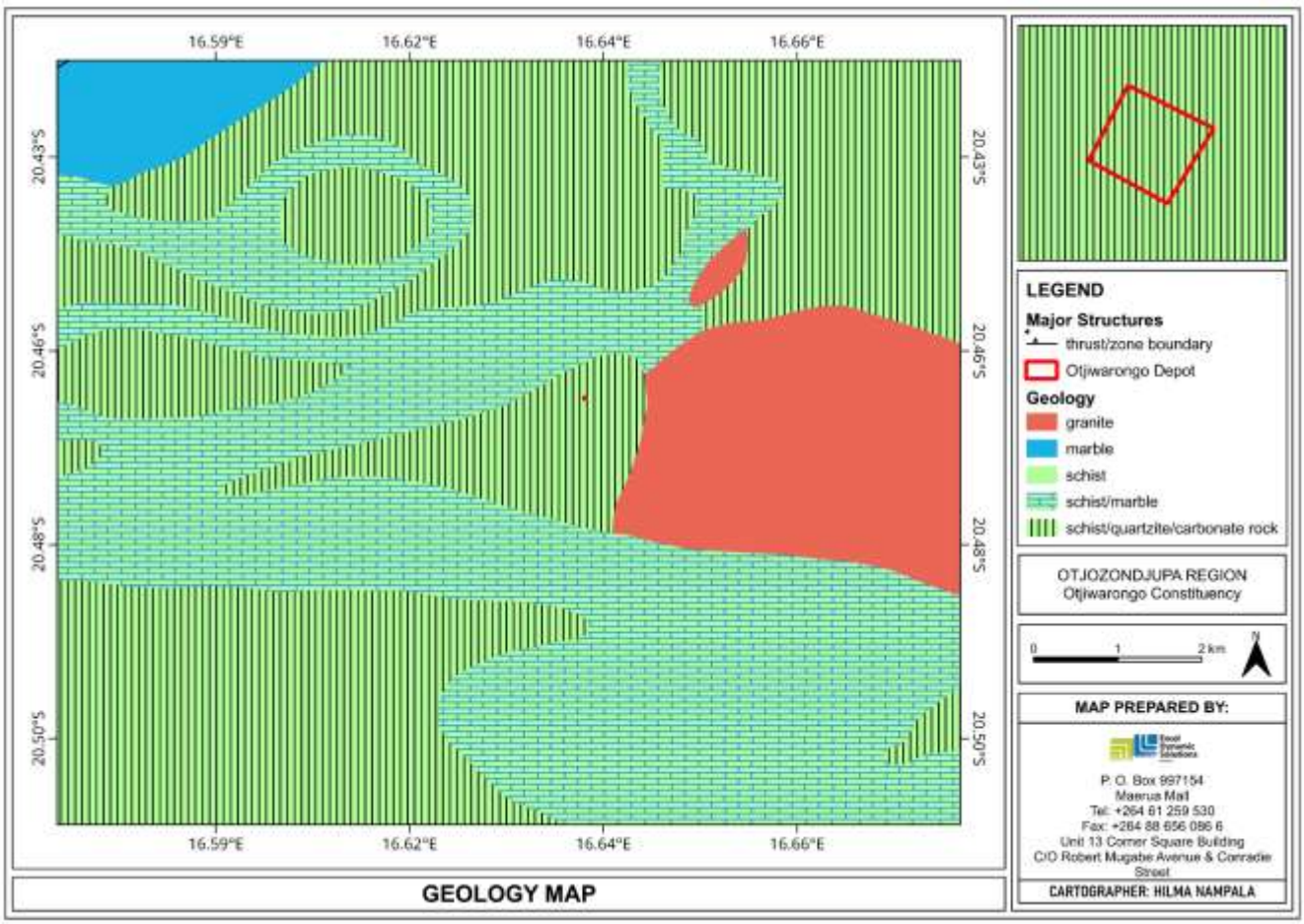


**Figure 7: the general geology of the project area**

## 5. RECORD REVIEW

*6.1 Environmental Records Review*

Environmental records (environmental audit report) from the previous environmental professional were obtained for EDS by the Project Coordinator (Client).

*6.2 Historical Information Review*

The following historical use information was reviewed:

*6.2.1 Historical Topographic Map*

EDS reviewed historical topographic maps of the Fuel Depot and surrounding properties using Google Earth and QGIS-generated maps. No special hazards, such as sinkholes, gravel pits, landfills, pipelines, open pits, stockpiled soils or railroad tracks and spurs, were indicated on the Fuel Depot map.

## 6. DATA GAPS

After reviewing the sources above regarding the Fuel Depot history, EDS determined that no data gaps would affect the environmental professional's ability to identify RECs for the Fuel Depot, except for the absence of the Environmental Management Plan.

6.1 *Specialized Knowledge and Reason for Completing Phase I Audit*

Pursuant to EMA 2007, EDS asked a representative of the user of the report, the owner of the fuel depot, if he had any specialized knowledge of environmental conditions associated with the Subject fuel depot.

## 7. SITE RECONNAISSANCE

EDS conducted a site visit to the fuel depot in November 2025 and observed its condition. A depiction of the fuel depot and surrounding area configuration is provided in Figure 1. Weather conditions during the site reconnaissance were sunny. The visual reconnaissance consisted of observing the fuel depot, the fuel pumps, the aboveground storage tanks, and the site control office, and systematically traversing the site to provide an overlapping field of view wherever possible. The periphery of the on-site structures was observed along with interior accessible common areas, storage and maintenance areas.

During the fuel depot reconnaissance, EDS sought the following items, which could indicate the presence of RECs at the facility.

- ***Hazardous Substances and Petroleum Products in Connection with Identified Uses***

No significant use or generation of hazardous substances is known to occur at the fuel depot. No manufacturing, fabrication or assembly operations are conducted on the fuel depot facility.

- ***Odors***

No strong, pungent, or noxious odours were noted or reported that would indicate RECs at the fuel depot facility were emanating from either area.

- ***Pools of Liquids***

No pools containing liquids likely to be hazardous substances or petroleum products were observed or reported on or adjacent to the fuel depot facility.

- ***Drums & Hazardous Substance, Petroleum Products and Unidentified Substance Containers***

No drums containing liquids likely to be hazardous substances or petroleum products were observed or reported on or adjacent to the Subject fuel depot facility.

- ***Heating and Cooling Source***

The office area is heated by electricity supplied by CENORED and cooled by window-installed air conditioners located at the rear of the building.

- ***Interior Stains or Corrosion***

No evidence of stains or corrosion on the floors, walls or ceilings at the fuel depot facility was noted or reported.

- ***Drains and Sumps***

No evidence of sumps was observed.

No significant stained soil or pavement was observed or reported at the fuel depot facility.

- ***Stressed Vegetation***

No areas of stressed vegetation were observed or reported on or adjacent to the fuel depot facility.

- ***Solid Waste***

EDS did not observe any areas that appeared to have been filled or graded that would suggest the presence of waste, including, but not limited to, construction debris, demolition debris or other solid waste. No improperly stored solid waste was noted.

- ***Waste Water***

No operations, likely to require a significant wastewater discharge, were noted or reported. Waters entering the sanitary system flow to the town's waste collection facilities.

- ***Wells***

No drinking water wells, dry wells, irrigation wells, injection wells, abandoned wells, or other wells were observed or reported.

- ***Septic Systems***

EDS did not observe any on-site septic systems

- ***Copy of EMP***

There is no copy of the EMP or the EMP training manual on site.

## 8. RECOMMENDATIONS AND CONCLUSIONS

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 2007. This assessment has found no evidence of RECs associated with the fuel depot facility.

A de minimis condition is a condition that generally does not present a threat to human health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. This assessment has revealed no evidence of de minimis conditions.

An historical recognized environmental condition (HREC) refers to an environmental condition which would have been considered a REC in the past, but which is no longer considered a REC based on subsequent assessment and/or remediation of any contaminants to below the most restrictive (generally residential) cleanup target concentrations or regulatory closure with no formal or implied restricted uses. The assessment has revealed no evidence of HRECs in connection with the fuel depot facility, except for the following:

No significant data gaps were identified that would affect the environmental professional's ability to identify RECs at the fuel depot facility.

Based on the information provided in this report, EDS recommends that No Further Action is required at the fuel depot facility, and that the MEFT consider renewal of the ECC.

## 9. LIMITATIONS

No environmental assessment or investigation is infallible. Some uncertainty will always exist concerning the presence or absence of potential Recognized Environmental Conditions at a particular fuel depot facility, irrespective of the rigor of the investigation. Accordingly, EDS does not warrant that Recognized Environmental Conditions, other than those identified in this report, do not exist at the subject fuel depot facility or may not exist there in the future.

The findings and opinions presented in this report are partially based on information obtained from various sources over which EDS has no control but believes to be reliable. Nonetheless, EDS does not warrant the authenticity or reliability of the information from these sources.

EDS believes that it has performed the services summarised in this report in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental risk assessment profession practicing at the same time and under similar conditions in the area of the project.

Conclusions regarding the site's condition do not constitute a warranty. If additional information becomes available concerning this site after the date of this report, EDS is under no obligation to revise the conclusions and recommendations of this report.