ENVIRONMENTAL MANAGEMENT PLAN FOR AN ABOVE GROUND TANK (DIESEL) AT KEHIJOMURAMBA VILLAGE IN OTJINENE(OMAHEKE REGION)

PROPONENT:KEHIHIJOMURAMBA TRADING CC

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ABBREVIATIONS

AEC	Advanced Environmental Consultant
EMP	Environmental Management Plan
GG	Government Gazette
HIV	Human Immuno-deficiency Virus
MET	Ministry of Environment and Tourism
NHC	National Heritage Council
ECO	Environmental Control Officer
MEA	Multinational Environmental Agreement
EIA	Environmental Impact Assessment

1. INTRODUCTION

Kehijomuramba trading cc seeks approval from ministry of environment and tourism to install/construct an aboveground diesels tank in omake region at kehijomuramba village, a place located 100 km from cotinine business.

Kehijomuramba trading cc is a Namibin owned company runned by the community in partnership with Acer petroleum Pty Ltd (proponent) is an oil and gas logistic company that operates under mount- meru a Tanzanian company. The company has been operation in other African countries like Congo, Zambia and Botswana. Acer started operating in Namibia in 2017 supplying oil to different retailers in around the country. The company has one filling station so far in operation.

2. GENERAL REQUIREMENTS FOR IMPLEMENTATION OF THE EMP

2.1 EMP Administration

The management and staff, including the construction team, shall be required to familiarize themselves with the content of the document while the project manager shall be tasked with the overall responsibility for the implementation thereof once the Service Station is fully operational.

2.2 Environmental Awareness Training

a) Construction Phase

The owner and construction company shall ensure that all his/her staff are aware of the importance and implications of the EMP and the need to commit to the relevant provisions contained in the document.

b) Operational Phase

The operational phase shall require that roles and responsibilities for all employees need to be established while the reasons and importance of mitigation measures shall be clearly explained, and this shall be an ongoing process.
The positive socio-economic and biodiversity impacts involve a number of external stakeholders and these relationships require close and regular interventions.
It is also important for all drivers to understand the context of the station designs for them to help during any emergency that will need their attention. All development must meet the standard as outline in the Guideline for the safety of the business and its users.

2.3 EMP Monitoring

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

Due to the above-stated, Advance Environmental Consultant (AEC) was appointed by the Proponent to conduct an EMP for the Construction of the service station. In terms of Namibia's Environmental Management Act (No. 7 of 2007, Section 27(2j), Government Notice No. 29 Listed Activities, and Section 6) and Government Notice No. 30 (EIA Regulations), the above proposed activity constitutes a number of listed activities which require Environmental Clearance.
In line with the above-stated laws, this scoping report will address all the necessary key elements in mitigating unforeseen circumstances.

In line with the Namibia's Petroleum Product and Energy Act 13 of 1990 Section 4 (1) Any person desiring to operate a retail outlet shall apply to the Minister for a retail license by duly completing Form PP/1 as set out in Annexure B, and shall lodge such application with the Minister together with such other documents or records as may be required by these regulations. Section 4 (2) an application for a retail license shall be accompanied by –

1. All buildings, road works, structures and plant erected or used in connection with petroleum products by a license-holder or certificate-holder shall comply with these Regulations and all other applicable laws.
2. Buildings, structures and plant used in connection with petroleum products by a license-holder or certificate-holder shall be erected, executed and maintained in such a manner as:
    - ✓ To avoid endangering the safety or health of any person, or the safety of any person's property; and
    - ✓ To prevent the risk of significant environmental harm.

Report thus only deals with the future development and operational phase included for the planning and building phase. Due to the above-stated, Advance Environmental Consultant (AEC) was appointed by the Proponent to conduct an EMP for the Construction of a truck port.

An EMP is one of the most important outputs of the EA process as it synthesizes all of the proposed mitigation and monitoring actions, set to a timeline and with specific assigned responsibilities. This EMP details the mitigation and monitoring actions to be implemented during the following phases of these developments:

- ✓ **Planning and Design** – the period, prior to construction/installation during which preliminary legislative and administrative arrangements, necessary for the preparation of the development, are made and engineering designs are carried out. The preparation of construction tender documents forms part of this phase;

- ✓ **Construction/installation** – the period during which the proponent, having dealt with the necessary legislative and administrative arrangements, appoints a contractor for the construction of the truck port and associated structures as well as any other construction process(s) within the development areas;

- ✓ **Operation and Maintenance** – the period during which the Truck port will be fully functional and maintained.
- ✓

EMP Scoping Report Objectives

The objectives of this plan are to:

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

2.4 ENVIRONMENTAL IMPACT ASSESMENT PRACTITIONER

2.1.1 Details of EAP that prepared the EIA Report

Name: Miss Albertina Simon

Address: P.O. Box 96255

Windhoek

Namibia

OFFICE NO: # 44 Continental building

Independence Avenue

Tel: 081 760 6590

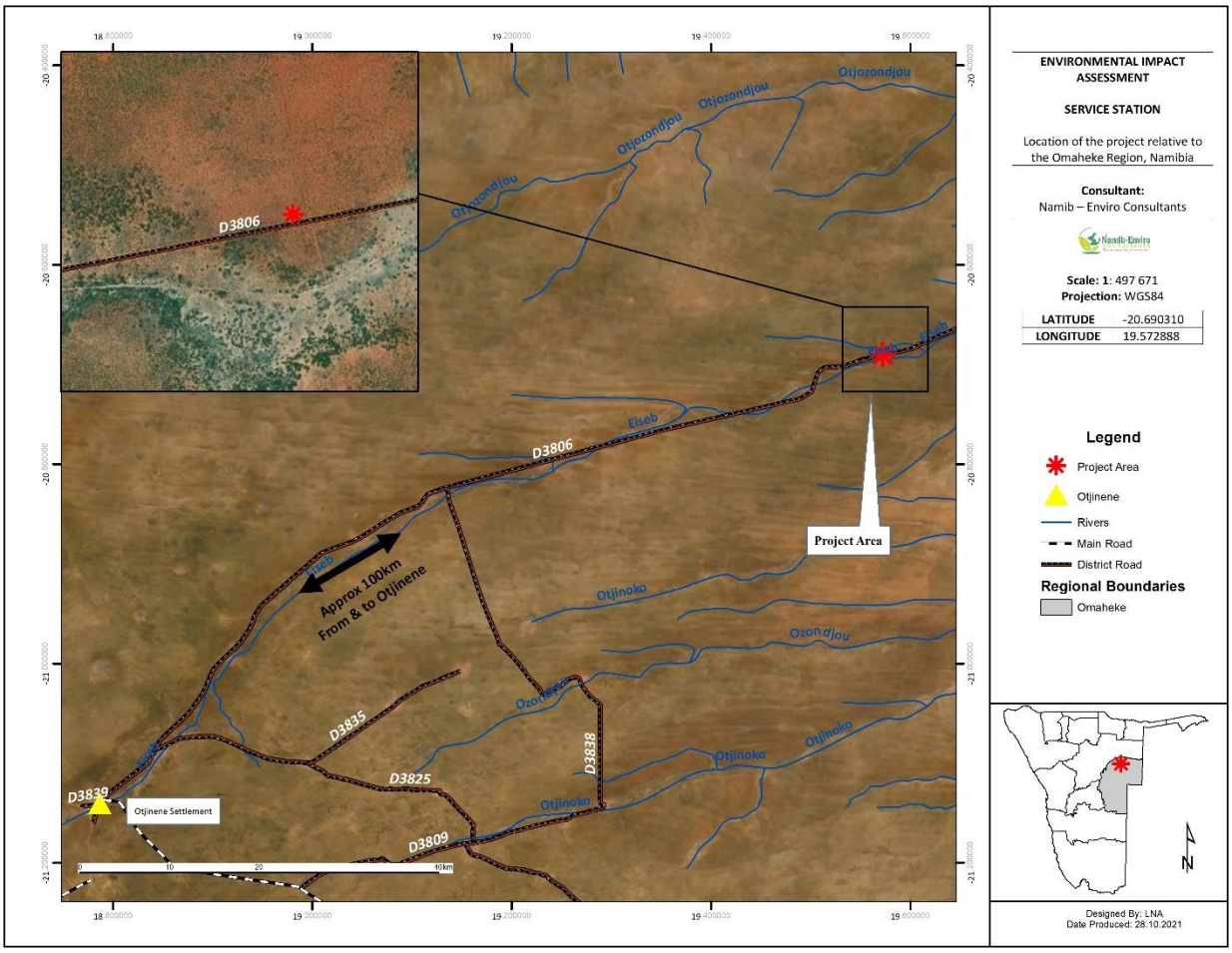
E-mail:albertina_simon@yahoo.com

Albertina Simon

Miss Albertina Simon the owner and founder of Advanced Environmental Agency is an Environmentalist with 3 years' experience in EIA regulation and conservation research support in Namibia. She has served as an environmental officer reviewing applications with environmental issues for different environmental assessment/consulting companies, before embarking on registering her own company as Assistant. Her key expertise includes: Review of Environmental Impact Assessments and related reports, compilation and quality control of records of decision for environmental authorizations, and development of operational guidelines, procedures and templates for administration of environmental applications. She has done 6 successful studies in the past 3 years since she stared in 2017

3. PROPOSED DEVELOPMENT

The development is proposed to take place at otjinee in Omaheke Co-ordinates-
20.690310,19.572888



In terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) the set-up of fuel facilities underground and aboveground storage of dangerous goods, including petrol, diesel, liquid, petroleum, gas or paraffin is a listed activity that may not commence without an Environmental Clearance Certificate (ECC).

Acer petroleum will make use of the existing service station in the area to upgrade it and operate it, which will be upgrade according to national standards and in accordance with Namibian petroleum laws and policies.

4. ROLES AND RESPONSIBILITIES

The proponent (ACER Petroleum Pty Ltd) is ultimately responsible for the implementation of the EMP, from the planning and design phase to the decommissioning phase (if these developments are in future decommissioned) of these developments. The proponent will delegate this responsibility as the project progresses through its life cycle. The delegated responsibility for the effective implementation of this EMP will rest on the following key individuals:

- Developer's Representative;
- Environmental Control Officer; and
- Contractor (Construction and Operations and Maintenance).

4.1 Developer's Representative

Acer Petroleum Pty Ltd should assign the responsibility of managing all aspects of these developments for all development phases (including all contracts for work outsourced) to a designated member of staff, referred to in this EMP as the Developer's Acer petroleum Pty Ltd. may decide to assign this role to one person for the full duration of these developments, but its Acer petroleum responsible to make sure the developers maintain the EMP guidelines for each of the development phases – i.e. one for the planning and design phase, one for the operational phase. The DR's responsibilities are as follow:

Responsibilities of the Developers Representative (Table 1)

PROJECT PHASE	Proponent
Making sure that all the environmental regulations /permission are adhere to.	Throughout the life cycle of the project
Making sure all the monitoring guidelines given in the EMP are maintained without exemption	During the planning phase Design/ set or construction phase
Any activity against the EMP guidelines should be Suspended immediately	Construction and operational phase
Making sure all employees get an introduction to health measures put in place for covid-19	Until it confirmed that covid-19 is no more

4.2 Environmental control officer

The Developer representative should assign the responsibility of overseeing the implementation of the whole EMP on the ground during the set up and operation and maintenance phases to an independent environmental consultant referred to in this EMP as the Environmental Control Officer (ECO). The DR/ Acer petroleum Pty Ltd may decide to assign this role to one person for both phases, or may assign a different ECO for each phase. The ECO will have the following responsibilities during the construction and operation and maintenance phases of these developments:

- Management and facilitation of communication between the proponent, Developers representative, the contractors, and Interested and Affected Parties (I&APs) with regard to this EMP;
- Conducting site inspections (recommended minimum frequency is weekly) of all operation and/or infrastructure maintenance areas with respect to the implementation of this EMP
- Monitor and audit the implementation of the EMP (biannually);
- Assisting the Contractor in finding solutions with respect to matters pertaining to the implementation of this EMP;
- Advising the developers representative on the removal of person(s) and/or equipment not complying with the provisions of this EMP;
- Making recommendations to the DR with respect to the issuing of fines for contraventions of the EMP; and
- Undertaking an annual review of the EMP and recommending additions and/or changes to this document.

4.3 Contractor

Contractors appointed by Acer petroleum Pty Ltd are automatically responsible for implementing all provisions contained within the relevant chapters of this EMP. Contractors will be responsible for the implementation of this EMP applicable to any work outsourced to subcontractors. Contractors appointed during the construction phase and **Tables provided** to those appointed during the operation and maintenance phase. In order to ensure effective environmental management, the aforementioned chapters should be included in the applicable contracts for outsourced construction, operation and maintenance work. The tables below detail the management measures associated with the roles and responsibilities that have been laid out in this chapter.

5. MANAGEMENT ACTIONS

The aim of the management actions in this chapter of the EMP is to avoid potential impacts where possible. Where impacts cannot be avoided, measures are provided to reduce the significance of these impacts.

The following tables provide the management actions recommended to manage the potential impacts rated in the proposed development. These management actions have been organized temporally according to project phase.

5. ASSUMPTIONS AND LIMITATIONS

This EMP has been drafted with the acknowledgment of the following assumptions and limitations:

- This EMP has been drafted based on the site visit conducted for upgrading and Operation of a service station in Otjinene, Omaheke Region as outlined above. AEA consultants will not be held responsible for the potential consequences that may result from any alterations to the above mentioned layout.
- It is assumed that whole set up laborers will be sourced mostly from the Otjinene and Aminus town lands area and those migrant labors (if applicable) will be housed in established accommodation facilities within Otjinene.

Engineering designs have been carried out for the development of the associated services infrastructure (roads, potable water, storm water, sewerage and electrical reticulations)

6.1 Policy and regulations (Table 2)

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

	health or death.
Pollution Control and Waste Management Bill of 1999	The Bill promote sustainable development and the establishment of the Pollution Control and Waste Management Unit; to prevent and regulate the discharge of pollutants to the air, water and land; to make provision for the establishment of an appropriate framework for integrated pollution prevention and control; to regulate noise, dust and odor pollution; to establish a system of waste planning and management; and to enable Namibia to comply with its obligations under international law in this regard.
Draft Wetlands Policy of 2004	This policy strives to complement existing policy instruments regarding sustainable development and sound natural resource management in Namibia. Its implementation provides a platform for the conservation and wise use of wetlands, thus promoting inter- generational equity regarding wetland resource utilization. Furthermore, it facilitates the Nation's efforts to meet its commitments as a signatory to the International Convention on Wetlands (Ramsar) and another Multinational Environmental Agreements (MEA's).
National Waste Management Policy, 2010	This policy is focusing specifically on Waste Management and use of various technologies waste treatment and disposal to minimize health risks. It is also geared to have a unified waste management system countrywide. This policy provides the necessary guidance on the processes related to waste management in the MOHSS, wider Namibia health and social welfare sectors, and other relevant stakeholders. It is taking into consideration the process of integrated waste management from generation to final disposal. This practice also focusses on medical, household, mining, agricultural, and construction waste.
Labor Act No. 11 of 2007)	Consolidate and amend the labor law; to establish a comprehensive labor law for all employers and employees; to entrench fundamental labor rights and protections; to regulate basic terms and conditions of employment; to ensure the health, safety and welfare of employees; to protect employees from unfair labor practices; to regulate the registration of trade unions and employers' organizations; to regulate collective labor relations; to provide for the systematic prevention and resolution of labor dispute; to establish the Labor Advisory Council, the Labor Court, the Wages Commission and the labor inspectorate; to provide for the appointment of the Labor Commissioner and the Deputy Labor Commissioner; and to provide for incidental matters.
Public Health Act, No. 36 of 1919 and Amendments and Regulations	This Act makes provision for the prevention and control of infectious diseases, venereal diseases and epidemics. It also regulates AEC sanitation, food and public water supplies.

6.2 Construction Phase

The management actions listed in **Table2** applies during the construction phase. This table may be used as a guide when developing EMPs for other construction activities within these development areas.

Table 3: Construction phase management actions

ENVIRONMENTAL FEATURES	IMPACT	MAMAGEMENT ACTIONS	RESPONSIBLE PERSON
EMP Training	Lack of EMP awareness and the implications thereof	All construction workers are to undergo EMP training that should include as a minimum the following: • Explanation of the importance of complying with the EMP. • Discussion of the potential environmental impacts of construction activities. • Employees' roles and responsibilities, including emergency preparedness. • Explanation of the mitigation measures that must be implemented when particular work groups carry out their respective activities	Contractor
Conservation of vegetation	Loss of biodiversity	• There are few trees on the site which will not be affected by the operation, as the proponent will be using the subdivision cleared already. • The contractor should compile a Tree	Proponent

		Management Plan to protect the trees in the premises which should include the following as a minimum; #The contractor should apply to the local authority for a permit to remove these trees. #Special protection should be accorded to the protected tree species, which are to be found within the area. #A list should be complied of all trees to be removed detailing their location, the species as well as which tree will be planted to replace these. The nursery where these trees will be sourced from should also be included; #Workers are prohibited from collecting wood or other plant products on or near work sites. #No alien species may be planted on or near work areas	
Lay-down areas and materials camp	Loss of biodiversity	Suitable locations for the contractors lay-down areas and materials camp should be identified with the assistance of the Proponent and the following should be considered in selecting these sites: *The areas designated for the fuel tank infrastructure should be used as far as possible. *Second option should be degraded land.	Contractor and Proponent
Hazardous waste	Contamination of surface and ground water sources.	• All heavy construction vehicles and equipment on site	Contractor

		should be provided with a drip tray • All heavy construction vehicles should be maintained regularly to prevent oil leakages • Maintenance and washing of construction vehicles should take place only at a designated workshop area.	
Water, Sewage and grey water	Contamination of surface and groundwater sources and water wasting	• The wash water (grey water) collected from the cleaning of equipment on-site should not be left standing for long periods of time as this promotes parasite and bacterial proliferation. Grey water should be recycled: ➢ Used for dust suppression; ➢ Used to water a vegetable garden, or to support a small nursery; ➢ Used (reused) to clean equipment. • Grey water that is not recycled should be removed on a regular basis. • It is recommended that construction takes place outside of the rainy season in order to limit	Contractor

		flooding on site and surface and ground water pollution. • No dumping of waste products of any kind in or in close proximity to water bodies. • Heavy construction vehicles should be kept out of any water bodies and the movement of construction vehicles should be limited where possible to the existing roads and tracks. • Ensure that oil/fuel spillages from construction vehicles and machinery are minimized and that where these occur, that they are appropriately dealt with.	

		• Drip trays must be placed underneath construction vehicles when not in use to contain all oil that might be leaking from these vehicles. • Contaminated runoff from the construction sites should be prevented from entering the surface and ground water bodies. • All materials on the construction site should be properly stored. • Disposal of waste from the sites should be properly managed and taken to the designated landfill site as designated by the Gobabis municipal. • Construction workers should be given ablution facilities at the construction sites that are located at least 30m away from any surface water and ground water	

		resources and should be regularly serviced. • Washing of personnel or any equipment should not be done at an area properly suited and prepared to receive and contain polluted waters.	
General Waste	Visual impact and soil contamination	• The construction site should be kept tidy at all times. All domestic and general construction waste produced on a daily basis should be cleaned and contained daily. • No waste may be buried or burned. • Waste containers (bins) should be emptied regularly and removed from site to a recognized (town council) waste disposal site as	Contractor

		designated by the Gobabis municipality. • All recyclable waste needs to be taken to the nearest recycling depot where practical.	

7. PLANNING AND OPERATION PHASE

The Acer petroleum Pty Ltd management should ensure that the management actions detailed below should be adhered to during the period before construction on the proposed development commences. (**Table 4)**

7.1 Operation and maintenance phase

The management actions included in **Table 5**below applies during the operation and maintenance phase of these developments

Environmental Feature	**Impact**	**Management Actions**	**Responsible Person**
The Existing service Station stadium		Proper handling of the facilities like water and electricity and ablution facilities	Site Manager
Parking		Make ample provision for parking in the layout for cars and trucks	Proponent
Strom water and management		Storm water should be channeled into the designated water drainage system	Proponent

Design of underground Tanks		Make sure the installation is properly done and inspection be done	Site Manager/Environmental Officer
Aesthetics	Visual Impact	The proponent should consult with a view to incorporate the relevant local/national/international development guidelines which addresses the following: • The incorporation of indigenous vegetation into the development. • To mark the area with appropriate road warning signs (entrance and exit)	Proponent
Noise	Noise irritation Impact	The proponent should consult with the view to incorporate the relevant local/nation/international guidelines to manage the generation of traffic noise in the development area	Proponent
Hazardous waste	Contamination of surface and groundwater sources	Oil may lack during fueling or refilling of the tank	Proponent / manager in Charge on site
Hazardous Substances		• Storage of the hazardous substances in abounded area, with a volume of 120 % of the largest single storage container or 25 % of the total storage containers whichever is greater • The rehabilitated area should not be	Proponent/ manager in Charge on site

		higher (or lower) than nearby drainage channels. This ensures the efficiency of re-vegetation and reduces the chances of potential erosion • Topsoil is to be spread across excavated areas evenly • Deep ripping of areas to be rehabilitated is required, not just simple scarification, so as to enable rip lines to hold water after heavy rainfall • Ripping should be done along slopes, not up and down a slope, which could lead to enhanced erosion	
HIV/AIDS and TB training	Lack of awareness regarding implications of risky behavior	The Contractor should approach the Ministry of Health and Social Services to co-opt a health officer to facilitate HIV/AIDS and TB education programmed periodically on site during the construction phase	Contractor
Road safety	Injury or loss of life	• Demarcate roads clearly. • Off-road driving should not be allowed • All vehicles that transport materials to and from the site must be roadworthy	Contractor

		• Drivers that transport materials should have a valid driver's license and should adhere to all traffic rules • Loads upon vehicles should be properly secured to avoid items falling off the vehicle.	
Safety around worksites	Injury or loss of life	• Excavations should be left open for the shortest time possible. • Excavate short length of trenches and box areas for services or foundations in a manner that will not leave the trench unattended for more than 24 hours	Contractor
Water, Sewage and grey water	Contamination of surface and groundwater sources and water wasting	The wash water (grey water) collected from the cleaning of equipment on-site should not be left standing for long periods of time as this promotes parasite and bacterial proliferation. Grey water should be recycled: ➢ Used for dust suppression; ➢ Used to water a vegetable garden, or to support a small nursery; ➢ Used (reused) to clean equipment Grey water that is not recycled should be removed It is	Contractor

		recommended that construction takes place outside of the rainy season in order to limit flooding on site and surface and ground water pollution. Spillages from construction vehicles and machinery are minimized and that where these occur, they are appropriately dealt with. on a regular basis	

7.2 COVID-19 HEALTH MEASURES
Table 6

Measure	Responsible person
All tracks' drivers are instructed to sanitize their hands upon entering the premises and at all times during their stay	Management on site/health practitioners on site
Register of trucks coming in from different countries should be taken seriously.	Management on site

Masks and temperature thermometers should be available at all times at the premises	Proponent
Proper hygiene, cleaning of the ablution facilities after every couple of hours should be maintained to prevent the spread of covid-19 among the truck drivers	Proponent

8. DECOMMISSIONINGPHASE

The decommissioning of these developments is foreseen as this truck port is temporary, mainly for as long as the pandemic of Covid -19 is still going on. In the event that this development is decommissioned the following management actions should apply.

Decommissioning phase management actions (Table 7)

Environmental Feature	Management Actions
Deconstruction activity	Many of the mitigation measures prescribed for construction activity for these developments (**Table** above**)** would be applicable to some of the decommissioning activities. These should be adhered to where applicable.
Rehabilitation	Proper relocation of the tank should be done; Environmental officer should do inspections and environmental audit.

9. CONSLUSION

Development of new projects are now preceded by critical analysis and assessment of the activities, but due to the Emergency of the outbreak of covid-19 the EMP is prepared as required by EMA through visiting the Site, to provide mitigation on the impacts that are likely to be caused by the activity.

The analysis of the construction of an emergency truck port will have positive impact to the proponent and the country at large.
The impacts will include:

- ✓ Reduced chances in transmission of the disease
- ✓ Easier way of tracing
- ✓ Increase in Government revenue

Hence the need to identify any negative environmental impacts of the project, during the early stages of planning and design, the strategy will ensure sustainable execution of the project's activities and protection of the environment, and guaranteeing a respectful and fair treatment of all people using the venue.

FIGURES