# UPDATED ENVIRONMENTAL MANAGEMENT PLAN (EMP) REPORT

# THE OPERATION OF THE EXISTING SANNY AUTO REPAIRS SERVICE STATION AT OGONGO, OMUSATI REGION

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#### 1.INTRODUCTION

Sanny Auto Repairs CC is currently operating Sanny Auto Repairs service station at Ogongo in Omusati region. The project falls under the category of listed activities according to the Environmental Management Act (2007) and its Regulations (2012), necessitating the acquisition of an Environmental Clearance Certificate (ECC) before proceeding.

The ECC for this project was previously issued on the 05 February 2016, and it is therefore expired. Based on this premise, Nam Geo-Enviro Solutions has been therefore appointed by Sanny Auto Repairs CC to assess the current condition on site (See appendix A for the environmental monitoring and evaluation report), update the Environmental Management Plan (EMP), and apply for the renewal of the ECC for the continuous operation of the existing Sanny Auto Repairs service station at Ogongo.

The Environmental Management Plan (EMP) is a dynamic document that undergoes regular review and updates as required. It ensures that all contractors, subcontractors, and consultants involved in the project comprehend the potential environmental impacts associated with the proposed activities and implement appropriate measures to effectively manage them.

This EMP has been developed specifically to serve as a managerial tool for overseeing the operations of Sanny Auto Repairs service station. It is crucial that all contractors and subcontractors involved in this project are made aware of the EMP's details.

#### 2. OBJECTIVES

The main goal of the environmental management plan (EMP) is to adopt a proactive approach in dealing with possible impacts before they occur. Consequently, the EMP has the following aims:

- Enforce environmental legislations of Namibia and other requirements throughout its lifespan to outline mitigation measures for managing environmental and socioeconomic impacts associated with the project.
- Provide a framework for implementing the management actions for operational and possible decommissioning phases.
- To promote sustainable development.
- Ensure that the project complies with the goals of the Namibian Environmental Management Act (No. 7 of 2007).
- To ensure the project complies with relevant authorities.
- To recommend suitable environmentally friendly practices.

#### 3. PROJECT ACTIVITIES

This EMP covers activities in the operation phase. The activities associated with this phase are listed in the table below:

**Table 1:**Activities associated with the project.

#### **Operational phase**

- Fuel distribution
- Off-loading of fuel
- Dispensing of fuel into vehicles
- Housekeeping
- Corrective Maintenance (Replacing of non-functioning equipment)

#### 4. DETAILS OF CURRENT STORAGE AND INSTALLATIONS ON SITE

The service station has two fuel storage tanks with capacities of 14000L (Diesel) and 46000l (petrol). A water and oil interceptor on forecourt, oil and water interceptor on filler points and an oil and water separator pit are installed on site.

## 5.LEGAL FRAMEWORK: LEGISLATION, POLICIES AND GUIDELINES RELEVANT TO THE PROJECT

This section focuses on the regulatory frameworks which Sanny Auto Repairs service station should adhere to. The table below outlines the legal frameworks relevant to the project.

**Table 2:** Regulatory framework relevant to the project

LEGISLATION	RELEVANT PROVISION	TYPE OF REQUIREMENT	
Namibian	- "The State shall actively promote and	The constitution requires	
Constitution	maintain the welfare of the people by	sustainable utilisation of	
First	adopting policies that are aimed at	natural resources basis for	
Amendment	maintaining ecosystems, essential the benefit of all Namibians,		
Act 34 of 1998	ecological processes, and the biological	both present and future."	
	diversity of Namibia. (Article 95(I)).		
	-Article 16(1) guarantees all persons the Through implementation of		
	right to property, to acquire, own and	the EMP, Sanny Auto	
	dispose of property, alone or in	Repairs CC should ensure	
		conformity to the constitution	

	association with others and to bequeath such property.  -It further promotes the sustainable utilisation of living natural resources basis for the benefit of all Namibians, both present and future." (Article 95(I)).	in terms of environmental management and sustainability.
Environmental Management Act 7 of 2007	-Requires that projects with significant environmental impacts are subject to an environmental assessment process (Section 27).  -Requires adequate public participation during the environmental assessment process for interested and affected parties to voice their opinions about a project (Section 2(b-c)).  -According to Section 5(4) a person may not discard waste as defined in Section 5(1)(b) in any way other than at a disposal site declared by the Minister of Environment, Forestry and Tourism or in a manner prescribed by the Minister.	This Act and its regulations should inform and guide the environmental assessment process.  The project proponent should ensure that all provisions of the EMP are implemented, and regular environmental monitoring and evaluations should be conducted by independent consultants.
EMA Regulations (2012)	-Details projects which cannot be undertaken without an ECC.	This project is listed under activities which cannot be undertaken without an ECC, thus this EMP is updated for the renewal of the ECC.
Pollution and Waste Management Bill (draft)	-This bill defines pollution and the different types of pollution. It also points out how the Government intends to regulate the different types of pollution to maintain a clean and safe environment.  -The bill also describes how waste should be managed to reduce environmental pollution. Failure to comply with the requirements is considered an offense and is punishable.	The project should be executed in harmony with the requirements of the act to reduce negative impacts on the surrounding environment from waste.  A waste management strategy that follows recycling, reuse and reducing should be commissioned throughout the project activities.

South African National Standards SANS 10089-3	-Part 3: The installation of underground storage tanks, pumps/dispensers and pipe work at service stations and consumer installations is stated in SANS 10089-3.	All waste should be handled by qualified waste handling contractors and disposed of on approved landfill.  Service stations should be constructed according to the SANS standard.  Sanny Auto Repairs service station is constructed according to the SANS guidelines.
Soil Conservation Act 76 of 1969	-This act makes provision for combating and prevention of soil erosion, it promotes the conservation, protection and improvement of the soil, vegetation, sources, and resources of the Republic of Namibia.	Service stations are mainly associated with spillages which can end up contaminating the soil. This document aims at guiding the proponent during operation and perhaps decommissioning to prevent soil erosion and contamination of the soil.
Atmospheric Pollution Prevention Ordinance 11 of 1976	-This regulation sets out principles for the prevention of the pollution of the atmosphere and for matters incidental there to. Part III of the Act sets out regulations pertaining to atmospheric pollution by smoke. While preventative measures for dust atmospheric pollution are outlined in Part IV and Part V outlines provisions for Atmospheric pollution by gases emitted by vehicles.  -The Act requires that there is a need to register a controlled area with certificate to operate air polluting activities. The retail license covers all elements and requirements of this Act.	Ministry of Mines and Energy

Water Act 54 of 1956	24 of 2004 is presently without regulations; therefore, the Water Act No 54 of 1956 is still in force:  -A permit application in terms of Sections 21(1) and 21(2) of the Water Act is required for the disposal of industrial or domestic wastewater and effluent.	Section 21(2) stipulates that purified effluent is to be returned as close as possible to the point of abstraction of the original water.  An approved waste handling contractor should collect water in the oil and water
	-Prohibits the pollution of underground and surface water bodies (S23 (1).  -Liability of clean-up costs after closure/ abandonment of an activity (S23 (2)).  -Protection from the surface and underground water pollution.	separator pit.  No wastewater should be disposed of into the environment.
	underground water pollution	
Labour Act (No	-135 (f): "the steps to be taken by the	As a requirement on site, a
11 of 2007) in	owners of premises used or intended for	Safety and Health
conjunction	use as factories or places where	representative should be
with	machinery is used, or by occupiers of such	appointed.
Regulation 156,	premises or by users of machinery about	
<b>'Regulations</b>	the structure of such buildings of otherwise	The employer shall report all
Relating to the	to prevent or extinguish fires, and to	incidents occurring on site to
Health and	ensure the safety in the event of a fire, of	the Ministry and accordance
Safety of	persons in such building;" (Ministry of	to the regulations.
Employees at	Labour and Social Welfare).	The proponent should
work'.	-This act emphasizes and regulates basic	ensure securing a safe
	terms and conditions of employment, it	environment and preserving
	guarantees prospective health, safety and	the health and welfare of
	welfare of employees and protects	employees at work.
	employees from unfair labour practices.	This will include applying
		appropriate hazard
		management plans and
		enforcing Occupational
		Health and Safety (OHS)
		enforcement by contractors.
Public Health	-A person who intends to conduct on a	The service station must be
and	premises activities which generate	registered with the town
Environmental	special, industrial	council for a certificate of
Act, 2015	hazardous or infectious waste must be	fitness.
	registered for that purpose with the local	
	authority concerned.	

	(3) A person or local authority engaged in activities contemplated in subsection (1) or (2) must ensure that the waste generated on the premises concerned is kept and stored (a) under conditions that causes no harm to human health or damage to the environment; and (b) In accordance with applicable laws.  (4) All waste contemplated in this section must be stored in approved containers and for the maximum period determined by the head of health services or the chief health officer.	
Petroleum Products and Energy Act 13 of 1990	-The Act requires that for the operation of the service station, a retail license must be obtained from the relevant ministry. Adding on, the Act requires incident reporting of major spillages occurring on site for pollution control.	The proponent is required to have a retail licence from Ministry of Mines and Energy.
Hazardous Substances Ordinance 14 of 1974 Sections 3 and 27	-Provisions for hazardous waste are amended in this act as it provides "for the control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain circumstances; to provide for the prohibition and control of the importation, sale, use, operation, application, modification, disposal or dumping of such substance; and to provide for matters connected therewith".  -The Act requires that a license must be obtained for the storage and distribution of a classified hazardous substance with the relevant Authority	hazardous waste handler.
Road Ordinance 1972 (Ordinance 17 0f 1972)	-Width of proclaimed roads and road reserve boundaries (S3.1) -Control of traffic during operational activities on the trunk and main roads (S27.1).	The proponent should ensure compliance with the terms of the Road Ordinance.

	-Infringements and obstructions on and			
	interference with proclaimed roads.			
	(S37.1)			
	-Distance from proclaimed roads at which			
	fences are erected (S38).			
Nature	-This ordinance prohibits "picking of	The proponent should		
Conservation	indigenous plants in private nature	protect various species that		
Ordinance 4 of	reserves 24. (1) No person shall without	ut have conservations status.		
1975 with	the written approval of the Minister pick			
amendments	any indigenous plant, or any portion of an			
and special	indigenous plant, in a private nature			
regulations	reserve: Provided that the owner of the	e		
	land concerned may at any time pick any			
	indigenous plant, other than a protected			
	plant, on such land"			
National	-The action plan was operationalised in a	The proponent should		
Biodiversity	bid to make aware the critical importance	consider all associated		
Strategy and	of biodiversity conservation in Namibia,	impacts, both acute and long		
Action Plan	putting together the management of	term, and mitigation		
(NBSAP2)	matters to do with ecosystems protection,	measures should be		
	biosafety, and biosystematics protection	implemented to sustain the		
	on both terrestrial and aquatic systems.	local biodiversity.		

### INTERNATIONAL CONVENTIONS AND PROTOCOLS RELATED TO THE PROJECT

There are international conventions and protocols which aim to protect the environment to which Namibia is a signatory. These various international conventions and protocols which relate to the project are listed below:

- Vienna Convention for the protection of the ozone layer, 1985.
- United nations framework convention on climate change 992.
- Convention of Biological Diversity (1992).
- African Convention on the Conservation of Nature and Natural Resources (1968).

#### SUSTAINABILITY PRINCIPLES RELEVANT TO THE PROJECT

Apart from the above-mentioned regulatory framework, the following sustainability principles need to be taken into consideration, particularly to achieve proper waste management and pollution control.

#### CRADLE TO GRAVE RESPONSIBILITY

This principle states that those who manufacture potentially harmful products should be liable for their safe production, use, and disposal. Those who initiate potentially polluting activities should be legally responsible for their commissioning, operation, and decommissioning.

#### PRECAUTIONARY PRINCIPLE

This principle states that if there is any doubt about the effects of a potentially polluting activity, a cautious approach should be adopted.

#### THE POLLUTER PAYS PRINCIPLE

A person who causes damage to the environment must pay the costs associated with rehabilitation of damage to the environment and to human health caused by pollution, including costs for measures as are reasonably required to be implemented to prevent further environmental damage.

#### 6. ROLES AND RESPONSIBILITIES

It is particularly important to outline the roles and responsibilities of all stakeholders to ensure that the EMP is fully implemented. The proponent should also ensure the appointment responsible personnel's such as the Environmental Control Officer, Project Manager and Healthy and Safety officer to ensure the successful implementation of the EMP.

This section therefore describes the roles and responsibilities of the key stakeholders involved in the development, implementation, and review of the EMP for this project.

#### **6.1 COMPETENT AUTHORITY**

Ministry of Environment, Forestry and Tourism (MEFT): Department of Environmental Affairs and Ministry of Mines and Energy: Department of Petroleum affairs are the competent authorities for this project, and they are responsible for the review of the EMP and issue of the ECC.

#### **6.2 PROPONENT (SANNY AUTO REPAIRS CC)**

- Responsible for all financial and manpower obligations to implement this EMP.
- Sanny Auto Repairs CC should delegate suitable qualified person(s) with the responsibility to ensure implementation of the EMP.
- Protect the environment and rehabilitate the environment as prescribed in the EIA.
- Give warnings and impose fines and penalties on the contractor if the contractor neglects to implement the EMP satisfactorily.
- Make sure that a copy of the EMP is readily available on-site and that all site staff are aware of its content.
- Appointment of all personnel responsible for the implementation of the EMP

#### **6.3 FUEL SUPPLIER**

- Comply to the cradle to grave responsibility and polluter pays principle.
- Supply fuel to the site.

#### **6.4 APPOINTED CONTRACTOR**

- The contractor is responsible for the implementation of the EMP.
- Should be aware of any environmental matters as deemed necessary by the contractor.
- The contractor shall take adequate steps to educate all members of the workforce as well as supervisory staff on the relevant environmental laws and protection requirements as described in the EMP.
- Acquire a basic understanding of the key environmental features on the site and its immediate environs.
- Make sure that a copy of the EMP is readily available on-site and that all site staff are aware of its content.

#### **6.5 PROJECT MANAGER**

- Required in carrying out the overall responsibility for the implementation of the EMP to ensure that all required resources and mechanisms for environmental management are in place.
- Liaising directly with the relevant authorities concerning the preparation and implementation of the EMP and meeting the conditions documented in the environmental clearance certificate.
- Bear the overall responsibility for managing the project contractors and ensuring that the environmental management requirements are met.
- Inform the contractors of the EMP and Environmental clearance certificate obligations.
- Approve all decisions regarding environmental procedures and protocols that must be followed.
- Have the authority to stop any activities in contravention with the EMP.
- In consultation with the Environmental Control Officer (ECO) has the authority to issue fines for transgressions of basic conduct rules and/or contravention of the EMP.
- Maintain open and direct lines of communication between the proponent and interested and Affected Parties (I&APs) regarding environmental matters.
- Attend regular site meetings and inspections where required.

#### **6.6 ENVIRONMENTAL CONTROL OFFICER**

- Required to take independent responsibility of the implementation of this EMP.
- Conduct environmental monitoring as per EMP requirements.
- Monitor the performance of the contractors and ensure compliance with the EMP.
- Maintenance, update, and review of the EMP.
- Liaison between the contractor, authorities, and other key stakeholders on all environmental concerns.
- Conducting environmental incidents investigation as well as coming up with corrective and preventative actions.
- Communicate all amendments of the EMP to the relevant stakeholders.
- Conduct biannual audits to ensure that the system for implementing the EMP is effective.

#### 6.7 HEALTH AND SAFETY ENVIRONMENTAL OFFICER

- The HSEO should record and report all incidents on site.
- Ensure that safety is practiced for all activities on site.
- Prepare and implement safety procedures.
- Communicate all safety-related issues.
- Carry out any incident/accident investigations at the site.
- Conduct training.
- Issuing PPE to employees.
- Conduct Safety Health and Environmental awareness inductions, and at least the following topics should be covered, (the importance of complying with the relevant Namibian and International legislation, roles, and responsibilities, including emergency preparedness, basic rules of conduct, the Do's, and Don'ts).

#### 7. MANAGEMENT OF ENVIRONMENTAL IMPACTS

This section outlines the potential impacts of the project and provides measures to reduce and or improve them. It is the responsibility of the proponent and all assigned contractors to ensure that these measures are properly implemented.

#### 7.1 POLLUTION MANAGEMENT

Most pollutants and hazards associated with service stations are caused by hydrocarbons that are stored and handled on site. Potential hydrocarbon pollution impacts and mitigation measures are highlighted below:

#### 1. Surface soil and water contamination

Fuel spillages and leakages are the highest risks of pollution sources of soils and surface water contaminations at service stations. This type of contamination usually occurs during dispensing fuel into customers vehicles and when fuel tanker trucks offload fuel into the underground storage tanks. Over-filling of tanks, leaking and pipe bursts are the cause of most surface spillages.

Surface spillages if not contained can contaminate the surface soils. Soils contaminated by petroleum contaminants can affect soil health and harm soil microorganisms, reducing their number and activity. Surface spills can also contaminate surface water bodies as they can be washed into rivers and streams by floods and rain, thus can result in further underground water contamination.

#### Mitigation measures

- proper training of staff on fuel storage and handling.
- There should be a spill containment slab at forecourt and filler Points, covering the surfaces where fuels are handled to prevent groundwater pollution.
- Spillage control procedures must be in place according to SANS 10089-1:2008 and SANS 100131-2 standards, or better.
- contaminated soil shall be collected in a holding tray or drum, and which will then disposed at a licensed hazardous waste site.
- Spillages on site must be cleaned up immediately and if the spill is more than 200L it must be reported to the Ministry of Mines and Energy.
- An emergency response plan to give guidelines on spillages or leakages.
- All waste must be disposed of at approved disposal sites.
- No burial of any waste or burning should be done on-site.
- Sand buckets should be available on site to clean up minor oil spills.
- Standby oil cleaners and absorbents should be available during the decommission stage.

 All operational surfaces at the fuel retail facility must be installed with spill containment areas as per the relevant SANS standards (or better).

#### 2. Underground contamination

Accidental spills during fuelling operations or leaks from storage tanks can release petroleum products into the soil, which can seep into groundwater or flow over the surface and contaminate nearby water bodies. Underground fuel storage tanks and reticulation pipelines that carry fuel to the dispensing pumps have a risk of leaking, thereby polluting underground water. Oil spills and leakages may infiltrate underground, causing underground water contamination and soil in the absence of a concrete containment slab.

#### Mitigation measures

- proper training of staff and installation of suitable containment structures.
- Install oil interception system.
- Install isolating surface drainage system.
- There should be a spill containment slab at forecourt and filler Points, covering the surfaces where fuels are handled to prevent groundwater pollution.
- Storm water drainage system should be installed.
- Effluent testing should be done periodically to measure the quality of water from the oil and water separator to ensure that no contamination is being done to the environment.
- The condition of the fuel reticulation system should be checked regularly and repaired to prevent leakages.
- Monitoring wells should be installed to monitor possible oil leakages from underground tanks.
- All waste must be disposed of on approved disposal sites.
- All operational surfaces at the fuel retail facility must be installed with spill containment areas as per the relevant SANS standards (or better).

#### 3. Hydrocarbon vapours and odors

Hydrocarbon vapors can be released into the atmosphere when dispensing fuel into the customers vehicles and when tanker trucks are offloading fuel. Vapor contains elements such as benzene which is highly carcinogenic and may affect employees especially the fuel attendants due to prolonged exposure. Immediate atmospheric environment may be affected by fuel odors during refilling process.

#### Mitigation measures

- All venting systems and procedures should be designed according to SANS standards and placed in a sensible manner.
- Vent pipes should be placed in such a manner as to prevent impact on potential receptors.
- Vehicle idling time should be minimized by putting up educative signs.

#### 7.2 WASTE MANAGEMENT

Waste management involves the regular collection, transportation as well as processing and disposal or recycling and monitoring of different types of waste materials.

#### 1.General waste

Service stations often sell products such as snacks, drinks, and other consumer goods that come with packaging. If these products are not packaged using eco-friendly materials or if there is a lack of recycling options, it can result in increased paper and packaging waste. Additionally, service stations may not have sufficient waste bins or recycling facilities available to customers and staff. This can result in people disposing of waste inappropriately, leading to litter.

#### Mitigation measures

- Waste disposal systems should be implemented on site.
- Strictly no burning of waste on the site.
- Place whether and scavenger proof bins around the site.
- Contaminated wastes in the form of soil, litter, and other material must be disposed of at an appropriate disposal site at the nearest town.
- Good housekeeping should be maintained.
- Waste must be categorized by the contractor and disposed of in a suitable manner into different waste streams.
- No wastewater shall be disposed to soil.
- Waste should be disposed of at an authorized designated area.
- Proper ablution facility should be constructed on site.

#### 2. Hazardous waste

Hazardous wastes on site are usually minor oil spills on the surface. Spillages might occur during delivery to the tanks, overfilling of the tanks and vehicles Hazardous waste should be separated from general waste and kept in hazardous waste bins to be discarded at approved disposal sites or should be handled by certified contractors.

#### Mitigation measures

- Proper training of staff and the installation of suitable containment slab around the pumps and the filling points.
- Proper monitoring of the product levels in the tanks.
- All spills must be cleaned up immediately and if spill is more than 200 L, it must be reported to the Ministry of Mines and Energy.
- The presence of an emergency response plan and suitable equipment is advised, to react to any spillage or leakages properly and efficiently.
- Sand buckets should be available on the forecourt.
- Spill containment slab must be installed.
- Hazardous waste bins should be available on site to place contaminated waste.
- Equipment and materials to deal with spill clean-up such as spill kit must be readily available on site.
- Proper drainage, storm water free from pollution must be directed to a municipality drainage and contaminated water to the oil and water separator pit.

#### 7.3 HEALTH AND SAFETY MANAGEMENT

The operations of fuel retail facility can cause serious health and safety risks to workers on site. Occupational exposures are normally related to the dermal contact with fuels and inhalation of fuel vapours during handling of such products, fire, and occupational stress.

#### 1.Risk of fire explosion

Hydrocarbons are volatile under certain conditions and their vapours in specific concentrations are flammable. A small spark or ignition source in the vicinity can trigger an explosion. Additionally, mishandling of fuel by station personnel or customers can lead to accidents. For instance, if fuel is spilled on the ground and not cleaned up promptly, it can create a flammable atmosphere. However, inadequate training or negligence in fuel handling procedures can also contribute to fire hazards.

No fire or any source of fire ignition is to be allowed at the service station during any of the two phases (operational and decommissioning). Sanny Auto Repairs CC shall take all reasonable measures and active steps to avoid increasing the risk of fire during the activities on site and shall always ensure sufficient fire-fighting equipment on site.

#### **Mitigation measures**

- Sufficient water should be made available on site for firefighting purposes.
- Ensure that all fire-fighting devices are in good working order.
- Regular inspections and services should be carried out to inspect and test firefighting equipment.
- All personnel must be sensitised about fire protection measures and good housekeeping such as the removal of flammable materials.

- All fire precautions and fire control at the fuel retail facility must be in accordance with SANS 10089-1:1999, or better.
- The Emergency Response Plan should be implemented.
- Signs for no smoking and mobiles, should be displayed on site.
- Fire guards must also be constructed at the site to prevent the spread of fires.
- Fuel tanks should be established away from potential neighbouring fire points.
- All fire precautions and fire control at the service station must be in accordance with SANS 10089-1:2008, or better.

#### 2. Occupational health and safety

Service stations can pose health hazards to workers if proper safety measures are not in place or followed. Workers may be exposed to various occupational health hazards, including chemical exposure, noise, slips and falls, vehicle accidents, fire and explosion risks, manual handling injuries, and stress-related factors.

Employers have a responsibility to prioritize the health and safety of their workers. By implementing preventive measures and regularly assessing and addressing potential hazards, service station owners and managers can significantly reduce the health risks faced by their employees.

#### Mitigation measures

- Comply with all Health and Safety standards specified in the Labour Act.
- Train workers how to use the equipment safely and effectively.
- Training on occupational health and safety.
- Safety talks to be done every day before the commencement of work.
- Emergency response plans should be present.
- Safety officer to be stationed at the site.
- Formulation of a safety health and environment workers committee.
- A fully stocked first aid kit should permanently be available on site as well as an adequately trained staff member in a position to administer first aid.
- All workers should have access to the appropriate Personal Protective Equipment (helmets, gloves, respirators, work suits, earplugs, safety goggles, and safety shoes where applicable).
- Proper ablution facility should be used and clearly marked for males and females.
- Use dust suppression measures.
- Maintain good housekeeping.
- Reduce noise exposure by isolating noisy equipment and rotate tasks.
- · Conduct Hazard identification and risk assessments.
- Any leakage/spillage shall be immediately attended and provision of urgent cleaning.
- Work area should be monitored to maintain work environment free from any hazards.
- Provisions of immediate accident/incident reporting and investigation.

Safety posters and signages should be exhibited at conspicuous places.

#### 3. Risk and spread of HIV and AIDS

The spread of HIV/AIDS may occur during the project operational phase. The movement of different people to the site can promote anti-social behaviours like alcohol abuse, drug abuse and prostitution. Workers may be given little time to visit their partners, as a result they may find new partners from the local area. Condoms may also be limited or not provided at the workplace.

#### **Mitigation measures**

- Allocate time for workers to visit their families.
- Sensitization campaign to the staff on HIV/AIDS and other STDs.
- Free distribution of condoms on site.
- Free counselling to those already affected by the virus.

#### 4. Safety and security

Generally, projects attract different people from different locations. Some people can end up stealing, practicing anti-social behaviours like prostitution, alcohol, and drug abuse. During operation phase, robbers might be attracted especially during the night if the service station operates for 24 hours.

#### Mitigation measures

- Unauthorized people should not be allowed near or around the site.
- Equipment housed on site must be placed in a way that does not encourage criminal activities.
- For safety and security reasons it is recommended that the entire site be fencedoff and security personnel be employed to safeguard the premises and to avert criminal activates.
- Relevant safety signs should be clearly displayed.
- Ensure that adequate emergency facilities, including first aid kits, are available on site.
- Employing security officers.
- Install CCTV cameras.

#### 7.4 CUMULATIVE IMPACTS

These are the impacts on the environment, which result from the accumulation of other impacts. During the operational phase there might be cumulative impacts. Fuel is going to be off-loaded which can result in the release of hydrocarbon vapours which have an impact of reducing the air quality and causing fires and explosions. If hydrocarbon vapours is released in the atmosphere, it can also cause global warming, reduction of photosynthesis of plants and cancer.

#### Mitigation measures

- All possible sources of ignition in the entire area should be eliminated.
- Sufficient water should always be available in case of fire for firefighting purposes.
- Vent pipes should be placed in such a manner as to prevent impact on potential receptors.
- Regular check tests.
- No burial of any waste or burning should be done on-site, all waste must be disposed of on approved disposal sites.
- Waste should be disposed of as hazardous waste at a licensed facility by an authorized hazardous waste handler.

#### 7.5 POSITIVE IMPACTS AND ENHANCEMENT MEASURES

#### 1. Employment creation

Employment will be created during the lifespan of the project. The types of jobs will range from skilled, semi-skilled and unskilled. This will improve the wealth and livelihood of people.

#### **Enhancement measures**

- Employ locals in all casual labour.
- Gender equality, transparency should be ensured when recruiting.
- When recruiting, the responsible contractor should ensure gender equality.
- Implementation of training programs to train the unskilled workers for them to enhance their performances and to gain more knowledge that they might demonstrate at other levels in future.

#### 2. Generation of revenue

According to the law of Namibia, operating companies are to pay taxes. It is a requirement that the proponent will pay tax to the government hence this will benefit the nation at large given that money generated from taxes is diverted to the public by the government.

#### **Enhancement measures**

Continuous payment of taxes as regulated in the Namibian laws.

#### 3. Local development and improvement of general welfare

The service station can pave way for development of the area. Project investors are believed to bring development to communities where they are operating as a form of enhancing social responsibility. The project has a high probability of improving the general welfare for the local population. The locals will benefit during the life span of the project and the extent of benefiting can reach to the regional scale.

#### **Enhancement measures**

- First preference is to be given to the locals during employment.
- The proponent is to be engaged in community projects.
- The proponent should give employees market related salaries; this will improve the lives of the employees.
- The proponent should be engaged in community development programmes.

#### 4. Accessibility of fuel

The community people will have access to fuel and no need to travel long distance to fill up their vehicles. The probability of fuel supply is going to be definite; the severity will be greatly beneficial, and the overall significance will be very high.

#### **Enhancement measures**

• Maintain a consistent supply of the fuel to site.

#### 8. DECOMMISSIONING AND SITE CLOSURE

The proponent is responsible for paying for the expenses associated with rehabilitating any environmental damage that may occur due to the project's activities. The aim of rehabilitation is to bring the affected areas back to their natural state or to a condition that aligns with the principles of sustainable development.

To ensure the safe decommissioning of tanks, a professional from the oil industry, and an environmental officer should oversee the process. The old tanks should be properly disposed of at a suitable landfill site, and certificates should be provided as evidence of their disposal. As part of the decommissioning phase of the filling station, an assessment should be carried out to determine the level of contamination. This assessment will help identify if there is any contamination on the site and whether it poses any additional risks to human health and the environment. If contamination is found, the affected area should be remediated to meet acceptable standards.

Visualizing the decommissioning phase of the project is currently challenging. Nonetheless, during the decommissioning phase, the following measures should be adhered to:

- Trained professionals should be contracted to remove the storage tanks and pipelines.
- A contamination assessment should be carried out to assess and determine whether any pollution has occurred during the operation phase.
- If any contamination has occurred, it should be remediated at acceptable level.
- Demolition of building structures.
- Removing of equipment off site.
- Removal of associated infrastructures such as storage tanks.
- Rehabilitation of the site.

#### 9.ENVIRONMENTAL MONITORING AND MANAGEMENT PLAN

The purpose of environmental monitoring is to address and mitigate the adverse environmental impacts that may arise from a project during its entirety. It also seeks to establish and encourage a set of admirable practices to be adhered to. An environmental monitoring plan holds great significance as it provides valuable information and facilitates early identification of any unfavourable environmental conditions, thus enabling the implementation of appropriate measures for control.

Important parameters that are sensitive include environmental impacts such as hydrocarbon waste and general waste, contamination of surface and groundwater, occupational health and safety, impact on air quality and explosion of fire.

The suggested monitoring details are outlined in the following table.

**Table 3:** Monitoring of sensitive environmental impacts

IMPACT	TYPE OF MONITORING	MONITORING FREQUENCY
Hydrocarbon & general waste	<ul> <li>Site inspections of oil spills.</li> <li>Proper spill clean-up.</li> <li>Site inspection of housekeeping.</li> <li>Proper training of fuel attendants.</li> <li>Regular collection of waste.</li> <li>Monitoring of the oil/water separator</li> <li>Vacuum testing on underground fuel tanks.</li> </ul>	Daily Regularly
Contamination of surface and ground water	<ul> <li>Proper spill clean-up.</li> <li>Fuel reconciliation</li> <li>Inspect on underground tank of possible leakages.</li> <li>Vacuum testing on underground fuel tanks</li> </ul>	
Occupational health and safety	<ul> <li>Conducting hazard and risk Assessments.</li> <li>Safety procedures evaluation.</li> </ul>	Daily

	<ul> <li>Health and safety incident monitoring.</li> <li>Security inspection on site.</li> <li>Safety toolbox talk</li> <li>Conducting of hazard and risk assessment</li> <li>Regular supply of appropriate PPE to employees.</li> </ul> Regularly
Risk and explosion of fire	<ul> <li>Regular testing and servicing of firefighting equipment.</li> </ul>
Air quality	Air quality tests     Annually

#### 10.CONCLUSION

Implementation of Environmental Management Plan will help reduce the negative impact on the environment. However, in cases where adverse effects occur, immediate actions must be taken to prevent the situation from worsening.

Throughout the operational phase of the project, it is crucial to use the Environmental Management Plan as a guide on-site and follow the prescribed measures. Any parties found to be in violation of the plan should be held responsible for carrying out any necessary rehabilitation efforts. The current Environmental Management Plan should be applied to both the operational and decommissioning stages of the service station.

This Environmental Management Plan is deemed adequate for the continuous operations of the existing Sanny Auto Repairs service station at Ogongo in Omusati region.

#### 11.RECOMMENDATIONS

- The proponent should take all the necessary actions to implement the EMP to minimise adverse impacts on the environment.
- All contractors and sub-contractors taking part in any of the phases should be made aware of the contents of the EMP and of the Environmental Impact Assessment (EIA), to plan their activities accordingly in an environmentally sound manner.
- Environmental monitoring and evaluations on environmental performance should be conducted biannually.
- The next ECC renewal should be conducted two months prior to the expiry of the previous ECC.

#### 12. REFERENCES

- I. Constitution of the Republic of Namibia (1990).
- II. DEAT (2006). Guideline 5: Assessment of Alternatives and Impacts in support of the Environmental Impact Assessment Regulations 2006, Integrated Environmental Management Guideline Series. Pretoria: Department of Environmental Affairs and Tourism (DEAT).
- III. Environmental Management Act (2007).
- IV. Environmental Management Regulations (2012).
- V. Petroleum Products and Energy Act of Namibia (1990)
- VI. South African National Standard 10089-1. (2008). The petroleum industry part 1: Storage and distribution of petroleum products in above-ground bulk installations. South Africa: Standards South Africa publishers.
- VII. Water Resources Management Act 11 (2013)

### 13. LIST OF APPENDICES

Appendix A: Environmental Monitoring and Evaluation Report

# ENVIRONMENTAL MONITORING AND EVALUATION REPORT

# FOR THE OPERATIONS OF THE EXISTING SANNY AUTO REPAIRS SERVICE STATION AT OGONGO, OMUSATI REGION



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ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)	MS NDAPANDA HASHOLO

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#### 1.INTRODUCTION

Environmental monitoring is a tool and technique to observe and assess on environmental performance. The aim of environmental monitoring is to manage and minimize the impact a project's activities have on the environment, either to ensure compliance with laws and regulations or to mitigate risks of harmful effects on the natural environment and protect the health and safety of human beings.

The ECC for this project was previously issued on the 05 February 2016, and it is therefore expired. Based on this premise, Nam Geo-Enviro Solutions (NGS) has been appointed by Sanny Auto Repairs CC to assess the current state on site of Sanny Auto Repairs (SAR) service station and update the environmental management plan (EMP), for the renewal of Environmental Clearance Certificate (ECC), for the continuous operations of the service station.

### Request for Environmental Clearance and Environmental Management Plan (this report) –

The following environmental monitoring and evaluation report was compiled by Nam Geo-Enviro Solutions on behalf of Sanny Auto Repairs CC to assess the current environmental conditions on site and to apply for an ECC for the continuous operations of the existing Sanny Auto Repairs service station at Ogongo, Omusati region.

Consequently, Nam Geo-Enviro Solutions has revised the Environmental Management Plan (EMP) for the service station, that will be used as a site-specific plan to manage adverse impacts of the project, detailing environmental impacts of the existing facilities, assessment of existing controls and recommendations for environmental management to ensure the project continues its operations in an environmentally sound manner.

#### 2. OBJECTIVES

- Provide a detailed description of existing site infrastructure and activities.
- Conduct a comprehensive and all-encompassing legislative and other requirements assessment based on the proposed activities.
- Consider the potential environmental and social impacts of the operations and decommissioning of the existing fuel station.
- Identification of any mitigation action to be taken to minimize predicted adverse impacts and provide associated costs where applicable and practical. This will include the development of an environmental monitoring plan which will ensure that the mitigation measures are adhered to during the operation and decommissioning phases of the project in an Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts.

 Update the Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts for the continuing operations of the service station.

#### 3. PROJECT DESCRIPTION

The Service Station is located in Ogongo Village, along the C46, Oshakati-Outapi Road, Omusati region. The site falls into the following geographic coordinates: S-17.640289, 15.280975 E. **See appendix A** for site location map.

#### The service station currently operates the following facilities on site:

- Operation of fuel retail facilities to the public.
- Selling of already bottled LPG gas to the public.
- A mini grocer and fast-food shop (Puma Express shop).

### 3.1. Fuel storage tanks and installations details at Sanny Auto Repairs service station

The service station constitutes of two (2) fuel underground storage tanks, one for petrol with a capacity of 46000L and a diesel tank with a capacity of 14000L.

Table 1 below indicates the fuel storage and installation details currently on site.

Table 1: storage and installations details on site

Tank no:	T1	T2
Product	Petrol	Diesel
(petrol/diesel)		
Capacity (L)	46000L	14000L
Type of material		
(AG-aboveground	UG	UG
UG: underground)		
No. of islands	2	
No. of pumps	2	
No. of dispensers	8	
Oil & water	Available	
interceptor on		
forecourt		
Oil & water	Available	
interceptor on filler		
Oil & water interceptor on forecourt Oil & water	Available	

points	3		
Oil	&	water	Available
separa	ator pit	t	
Spill	conta	ainment	Available
slab			

#### 4. POLICY AND LEGISLATORY COMPLIANCE

This section outlines the legislative compliant requirements that the service station is required to comply to in respect to acquiring an Environmental Clearance Certificate (ECC).

#### 4.1 Environmental Management Act no.7 (2007) and its Regulations (2012)

According to the Environmental Management Act (2007) and its Regulations (2012) the existing development requires an Environmental Clearance Certificate as specified in the following sections of the Act shown in Table 2 below.

 Table 2: Listed activities relevant to the project

ACTIVITY	RELEVANT SECTIONS	

- 9. substance treatment, handling, and storage
- Hazardous 9.2 Any process or activity which requires a permit, licence or other forms of authorization, or the modification of or changes to existing facility for any process or activities which requires and amendment of an existing permit, licence, or authorization or which requires a permit, licence, or authorization in term of a law governing the generation or release of emission, pollution, effluent, or waste.
  - 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 or aboveground storage of dangerous goods including petrol, diesel, liquid, petroleum, gas, or paraffin.

#### 4.2 Other relevant policies and standards

Table 3 below outlines other policies, standards and acts relevant to the project and compliance status of the project with relevant acts and regulations.

 Table 3: Other requirements compliancy applicable

Aspect	Legislation	Type of Requirement	Compliance	Comments
			Status	
Environmental	Namibian Constitution First	The constitution requires	Compliant	-Fuel sold at the service
	Amendment Act 34 of 1998	sustainable utilisation of		station is imported therefore
		natural resources basis for		natural resources are not
		the benefit of all Namibians,		affected. However, there is
		both present and future."		need for continuous
		(Article 95(I)).		monitoring, to prevent
				groundwater contamination.
	Environmental Management	Requires that projects with	Compliant	An EIA was conducted as per
	Act 7 of 2007	significant environmental		EMA No: 7 of 2007, and an
		impacts are subject to an		ECC was granted for the
		environmental assessment		construction and operation of
		process (Section 27).		Sanny Auto Repairs service
				station.
	Pollution and Waste	All waste has to be handled	Compliant	-General waste is collected by
	Management Bill (draft)	by qualified waste handling		Municipality.
		contractors and disposed off		
		on approved sites.		
Soil	Soil Conservation Act 76 of	Section 3 (n) of the Act	Compliant	-The following has been
	1969	guards against erosion,		implemented as a way to
		denudation, and any forms of		prevent soil pollution on site:
		pollution to the soil.		spill containment slab, oil
		Accordingly, the operations of		separator and paving of the
		the service station should not		surrounding area to avoid

		result in the pollution or		erosion.
		erosion or degradation of the		
		soil around		
Air	Atmospheric Pollution	The Act requires that there is	Compliant	-The Service station has
	Prevention Ordinance 11 of	need to register a controlled		obtained a retail license from
	1976	area with certificate to		Ministry of Mines and Energy.
		operate air polluting activities.		, ,
		The retail license covers all		
		elements and requirements of		
		this Act.		
Water	Water Act 54 of 1956	A discharge license for	Compliant	-Oil and water separator pit
		wastewater from the oil and		purifies water from
		separator pit has to be		hydrocarbons pollution.
		obtained. Section 21(2)		-A certified contractor is
		stipulates that purified		contracted to clean the
		effluent is to be returned as		oil/water separator pit
		close as possible to the point		
		of abstraction of the original		
		water.		
	Water Resources	The act looks at protection of	compliant	-A concrete slab around the
	Management Act No 24 of	underground water resources		filler points to prevent
	2004 (still to be enforced)	and continuous monitoring of		underground contamination.
	,	water quality in the presence		-There is need for periodic
		of potentially polluting		sampling/monitoring of water
		activities.		quality.

Health and	Labour Act (No 11 of 2007) in	-As a requirement on site, a	Compliant	-There are trained OHS
Safety	conjunction with Regulation		Compliant	
Jaiety	156, 'Regulations Relating to	representative on site has to		representatives on site.
		•		-All accidents and incidents
	the Health and Safety of	• •		are investigated and recorded
	Employees at work'.	-The employer shall report all		in the incident register.
		incidents occurring on site to		
		the Ministry and accordance		
		to the regulations.		
	Public Health and	-(1) A person who intends to	Compliant	-The service station must be
	Environmental Act, 2015	conduct on a premises		registered with the town
		activity which generate		council for a certificate of
		special, industrial, hazardous,		fitness.
		or infectious waste must be		
		registered for that purpose		
		with the local authority		
		concerned		
		-(3) A person or local		
		authority engaged in activities		
		contemplated in subsection		
		(1) or (2) must ensure that		
		the waste generated on the		
		premises concerned is kept		
		and stored		
		(a) under conditions that		
		causes no harm to human		
		health or damage to the		
		environment; and		
		(b) In accordance with		

		applicable laws.		
		(4) All waste contemplated in		
		this section must be stored in		
		approved containers and for		
		the maximum period		
		determined by the head of		
		health services or the chief		
		health officer		
Oil and Gas	Petroleum Products and	-The Act requires that for the	Compliant	-Sanny Auto Repairs service
	Energy Act 13 of 1990	operation of the Service		station is authorised to sell
		station a retail license has to		petroleum products.
		be obtained from the relevant		-A spill register is kept in
		ministry		place to record and report all
		-Adding on the Act requires		accidental spillages on site.
		incident reporting of major		
		spillages occurring on site for		
		pollution control.		
	Hazardous Substances	The Act requires that a	Compliant	-Labelling of all Hazardous
	Ordinance 14 of 1974	license has to be obtained for		containers and or facility at
	Sections 3 and 27	the storage and distribution of		site with danger or warning
		a classified hazardous		signs.
		substance with the relevant		
		Authority.		

SANS/SABS	South African	National	SANS 10089-3 highlights on	Compliant	-Sanny Auto Repairs service
	Standards (SANS)	10089-3 of	the following: The installation,		station is constructed, and it is
	2010.		modification and		operating according to
			decommissioning of		SANS standards
			underground storage tanks,		
			pumps/dispensers and		
			pipework at service stations		
			and consumer installations.		
			Additionally, the following		
			items are also highlighted:		
			fire precautions & fire control		
			in bulk depots, protection &		
			welfare of personnel,		
			maintenance of & extension		
			to the Service Station,		
			pollution control and		
			transportation of petroleum		
			products by road & by rail.		

# 5.ENVIRONMENTAL MONITORING AND EVALUATION METHODOLOGY

The approach used for this monitoring involved evaluating the existing environmental conditions at the site, examining the currently implemented mitigation measures, and assessing their compliance with standard pollution control measures associated with the project.

# 6.ASSESSMENT OF ENVIRONMENTAL IMPACTS AND MEASURES CURRENTLY IMPLEMENTED ON SITE

This section outlines the impacts associated with fuel storage and handling on site and their current mitigation measures implemented on site.

### **6.1 ON-SITE POLLUTION MANAGEMENT**

Most pollutants and hazards associated with service stations are caused by hydrocarbon fuels that are stored and handled on site.

Possible hydrocarbon pollution impacts on site are highlighted below:

#### 1.Surface water and soil contamination

Fuel spillage and leakages are the highest risks of pollution sources of soils and surface water contaminations at service stations. This type of contamination usually occurs during dispensing fuel into customers vehicles and when fuel tanker trucks offload fuel into the underground storage tanks. Over-filling of tanks, leaking and pipe bursts are the cause of most surface spillages.

Surface spillages, if not contained can contaminate the surface soils. Soils contaminated by petroleum contaminants can affect soil health and harm soil microorganisms, reducing their number and activity. Surface spills can also contaminate surface water bodies as they can be washed into rivers and streams by floods and rain, thus can result in further underground water contamination.

#### Current mitigation measures implemented on site

- A concrete containment slab covering the forecourt and off-loading areas where pumping activities occur to contain the spills and prevent them from penetrating to underground.
- The service station has a canopy to prevent rain from washing of spills into surface water bodies and prevent surface water contamination.
- Spill register to record major spills and leakages is kept on site.

See photos in figure 1 below of surface pollution control measures currently on site.







**Image 2**: A concrete slab for surface spills containment.

Figure 1: surface pollution control measures currently on site

### 2. Underground contamination

Underground fuel storage tanks and reticulation pipelines that carry fuel to the dispensing pumps have a risk of leaking, thereby polluting underground water. Oil spills and leakages may infiltrate underground, causing underground water contamination in the absence of a concrete containment slab.

#### **Current mitigation measures implemented on site**

- There is a concrete slab covering the surface where fuels are handled to prevent fuel from infiltrating underground and contaminating undergroundwater.
- Oil & water interceptors at filler points to collect wastewater and oil spills from the forecourt and offloading to the oil & water separator pits that are installed on site.
- The service station is surrounded by interlocks prevent surface and underground contamination

See photos in figure 2 below of underground pollution control measures currently on site



**Image1:** Oil and water interceptor at filler points to collect wastewater and oils from the forecourt to the water and oil separator pits.



**Image 2**: Oil and water separator pits emptied regularly by certified contractors.



**Image 3:** concrete slab around the tank's filler area.



Image 4: Interlock surrounding the site

Figure 2: underground pollution control measures currently on site

### 3. Hydrocarbon vapours and odours

Hydrocarbon vapors can be released into the atmosphere when dispensing fuel into the customers vehicles and when tanker trucks are offloading fuel. Vapor contains elements such as benzene which is highly carcinogenic and may affect employees especially the fuel attendants due to prolonged exposure. Immediate atmospheric environment may be affected by fuel odors during refilling process.

### Current mitigation measures implemented on site

- Vent pipes have been installed on site (at least 3m high) to release vapors above the immediate atmosphere to enhance pollution attenuation.
- Two working shifts a day to prevent workers from prolonged exposure to hydrocarbon vapors.

See photos in figure 3 below of hydrocarbon vapours and odours pollution control measures currently on site



**Image 1**: Vent pipes have been installed on site (3m) to release vapors above the immediate atmosphere to enhance pollution attenuation.

Figure 3: hydrocarbon vapours and odours pollution control measures currently on site

#### **6.2. ON-SITE WASTE MANAGEMENT**

Waste management involves the regular collection, transportation as well as processing and disposal or recycling and monitoring of different types of waste materials. Different types of waste can be generated at the service station such as general waste and hazardous waste.

#### 1. General waste

Sanny Auto Repairs service station generates waste mainly from the mini shop and the kitchen, therefore most of the general waste produced on site is domestic waste. Waste is generally in form of food leftovers, plastics, cigarette butts, waste dumped on site by motorists fuelling up.

### Current mitigation measures implemented on site

- General Waste is collected by Municipality.
- Waste disposal bins are available.
- Good housekeeping is maintained.

See photos in figure 4 below of general waste pollution control measures currently on site



Figure 4: general waste pollution control measures currently on site

### **6.3 FIRE AND SAFETY MANAGEMENT**

The monitoring and evaluation also focused on the health and safety of the workers.

Hydrocarbons are volatile under certain conditions and their vapours in specific concentrations are flammable. If precautions are not taken to prevent their ignition, fire and subsequent safety risks may arise.

No fire or any source of fire ignition is to be allowed at the service station during any of the two phases (operational and decommissioning). Sanny Auto Repairs CC shall take all reasonable measures and active steps to avoid increasing the risk of fire through activities on site and prevent the accidental occurrence or spread of fire; and shall always ensure sufficient fire-fighting equipment on site.

### Current mitigation measures implemented on site

- Firefighting equipment are present at the Service Station and in good working condition.
- Safety signs forbidding smoking, use of cell phones, use of explosives etc, are displayed.
- Water is available at the Service Station.
- A first aid kit is available on site.
- Workers have personal protective clothing (PPE).
- Staff are trained on handling of fuel and firefighting.

See photos in figure 5 below of fire and safety control measures currently on site



Image 1: fire extinguishers on site



**image 2:** safety signs forbidding smoking, switching off running engines and no cell phone usage during filling up.

Figure 5: fire and safety control measures currently on site

#### **Hazardous waste**

Hazardous wastes on site are usually minor oil spills on the surface. Hazardous waste should be separated from general waste and kept in hazardous bins to be discarded at approved disposal or should be handled by certified contractors.

### Current mitigation measures implemented on site

 Sand buckets on site. sand is used to clean up accidentals spills of fuel and lubricants during refilling and storage. Sand is poured on the oil spillages as an absorbent and then collected and disposed of into contaminated sand waste bins.

See photos in figure 6 below of hazardous waste management control measures currently on site.



Figure 6: hazardous waste management control measures currently on site

### 7. MONITORING OUTCOMES AND RECOMMENDATIONS

### **Monitoring Outcomes**

The focus of this monitoring and evaluation report is on key environmental and legislative compliance in respect to the service station's operations. Compliance was categorized as follows:

- a. Non-Compliance (NC)
- b. Partial compliance (PC)
- c. Compliant(C)

 Table 4:Monitoring outcomes

IMPACT	COMPLIANCE STATUS	COMMENTS	
Surface water and	С	-A canopy installed,	
soil contamination		concrete spill	
		containment slab on	
		site.	
Underground	С	-Oil and water	
contamination		separator pits	
		available on site and	
		cleaned by a certified	
		contractor.	
Risk of fire	С	-Warning signs on	
explosion		use of explosives on	
		site displayed, fire	
		extinguishers, hose	
		pipes.	
Hydrocarbon	С	-Vent pipes installed	
vapours and odours		on site.	
Health and safety	С	-First aid kit and PPE.	
Hazardous waste	PC	-There are no	
		hazardous waste bins	
		on site.	
General waste	С	-Water proof waste	
		bins available.	

### 8. CONCLUSION

The monitoring and evaluation results of Sanny Auto Repairs service station's operations align with both SABS/SANS and Ministry of Mines and Energy standards and guidelines, which adhere to Namibia's national and international petroleum storage facility standards. The focus of the monitoring was on potential critical impacts of the project, encompassing surface and underground contamination, hydrocarbon vapours and odours, the risk of fire explosion, general waste, and hazardous waste.

The recently updated Environmental Management Plan contains information about the project's potential environmental impacts, mitigation measures, recommendations, and project decommissioning. The EMP serves as an on-site reference document for managing the environmental effects of the project. To ensure continuous monitoring of the project's environmental performance, biannual environmental monitoring and evaluations should be conducted.

#### 9. RECOMMENDATIONS

- Separation of different types of waste on-site.
- Installation of monitoring wells to detect underground tank leakages.

**JULY 2023** 

### 10. REFERENCES

I.Constitution of the Republic of Namibia (1990).

II. Environmental Management Act (2007).

III.Petroleum Products and Energy Act of Namibia (1990)

IV. South African National Standard 10089-3 (2010).

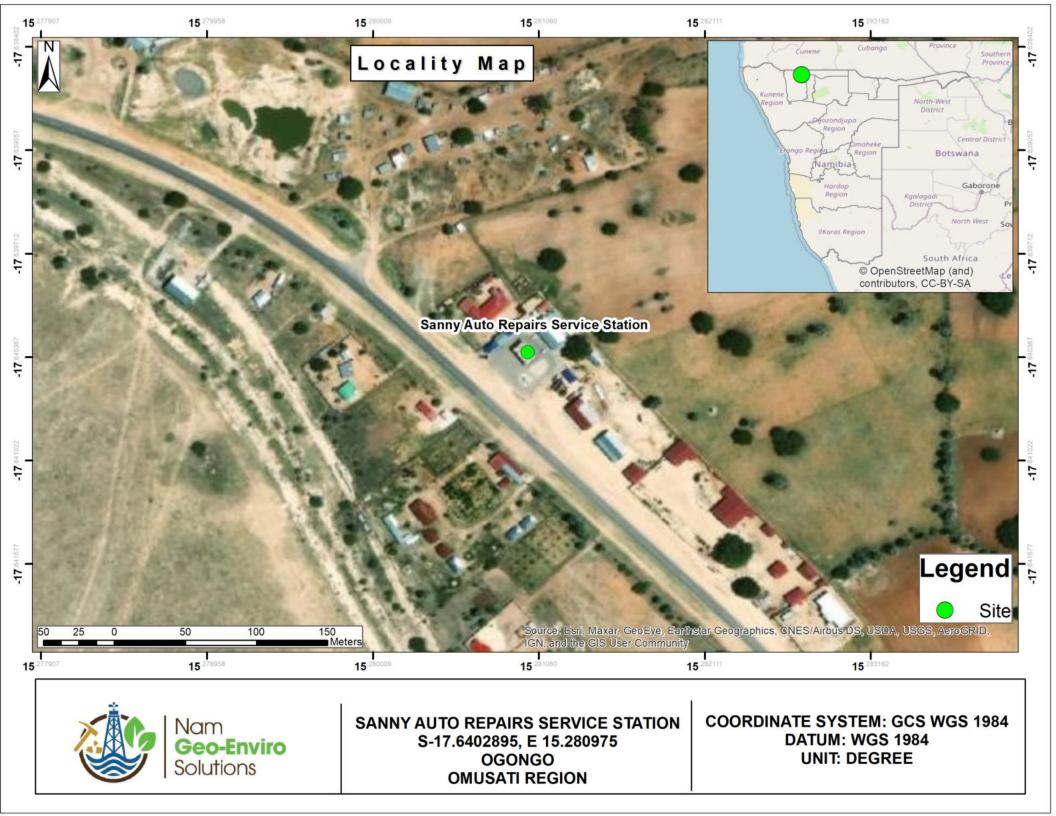
V.Water Resources Management Act 11 (2013).

## Appendix A: Site location map

# **Appendix B:** Proof of land ownership

# **Appendix C:** Previously issued ECC

# Appendix D: CV of EAP



# **Appendix B:** Proof of land ownership

Date 12.	5	01-	20	16
Dalla.	wi			

## TO WHOM IT MAY CONCERN

Mr Sonia Ambunga is awarded the land at Ogongo to build a service station. We from the Traditional Authority welcome the development to our area.

Yours Faithfully
Signature Love

Headman Hosaa.
Full name Hosea. Mdi Acongena.
Tel. OSI bb 4-7-7-25

H. NDIIKONGELA

5 - JAN 2016

OGONGO
OSHITALAMESHO

# Appendix C: Previously issued ECC



### MINISTRY OF ENVIRONMENT AND TOURISM

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05 February 2016

#### OFFICE OF THE ENVIRONMENTAL COMMISSIONER

The Managing Director Sanny Auto Repairs CC P. O Box 7669 Windhoek Namibia

Dear Sir /Madam

## SUBJECT: ENVIRONMENTAL CLEARANCE FOR THE PROPOSED NEW SANNY AUTO REPAIRS SERVICE STATION AT OGONGO, OMUSATI REGION.

The Environmental Impact Assessment Report and Environmental Management Plan submitted are sufficient as these have made an adequate provision of the environmental management for the proposed activities. From this perspective regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored throughout this process.

This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project. From this perspective, I issue this clearance with the following conditions: (a) Any pending permits should be obtained from relevant authorities; (b) This clearance should not be used for other related listed activities including bulk transportation of fuel to the proposed facility.

On the basis of the above, this letter serves as an environmental clearance for the project to commence. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from this project's activities. Instead, full accountability rests with Sanny Auto Repairs CC and their consultants.

This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office.

Yours sincerely,

Teofilus Nghitila

ENVIRONMENTAL COMMISSIONER

"Stop the poaching of our rhinos"

All official correspondence must be addressed to the Permanent Secretary

# Appendix D: CV of EAP



### Occupation

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### Education

Cachein of Scients
 (Environmental
 Brology)
 Honours degree
 (University of
 Namibia)

### NDAPANDA HASHOLO

## Key Experiences:

- Environmental Assessment & Management
- · Ecology, Climate & Livelihoods
- Project Planning and Management

### Project Experience

### 2022- Environmental Impact Assessment

-Construction and operation of an abattoir for a piggery on Farm Oribib in Outjo, Kunene Region, Namibia.

### 2022- Environmental monitoring and evaluation

-Operation of existing Solar Plant in Roshpinah, Karas Region, Namibia.

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## EMPLOYMENT RECORD

2023-Present Nam Geo-Enviro Solutions

**Environmental Officer** 

2022 - Nam Geo-Enviro Solutions

Environmental Intern

#### CERTIFICATION

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature of staff member or authorized representative of the staff

15 June 2023

Date