

OPERATIONS OF BAHNHOF SERVICE CENTRE'S FUEL RETAIL FACILITY SITUATED IN WINDHOEK

ENVIRONMENTAL MANAGEMENT PLAN UPDATE




Assessed by:



Assessed for:

**SL Service Station
(Pty) Ltd**

November 2020

Project:	ENVIRONMENTAL MANAGEMENT PLAN UPDATE FOR THE OPERATIONS OF BAHNHOF SERVICE CENTRE'S FUEL RETAIL FACILITY SITUATED IN WINDHOEK
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Report Approval	 André Faul

I PATRICK KOTZE acting as the representative of SL Service Station (Pty) Ltd, hereby confirm that we approve the Environmental Management Plan as presented in this document. All material information in the possession of the proponent that reasonably has or may have the potential of influencing the Environmental Management Plan was provided to the consultant.

Signed at Windhoek on the 16 day of NOVEMBER 2020.

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Company Registration Number / ID

SL Service Station (Pty) Ltd

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1 OBJECTIVES OF THE EMP

SL Service Station (Pty) Ltd trading as Bahnhof Service Centre requested Geo Pollution Technologies (Pty) Ltd to update their existing environmental management plan (EMP) in order to renew their environmental clearance certificate (ECC). The EMP provides management options to ensure impacts from operational activities are minimised. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary. The EMP acts as a stand-alone document, which can be used during construction, operational and decommissioning phases of any proposed activity or development. All contractors and sub-contractors taking part in the operations of this facility should be made aware of the contents of the EMP, so as to plan the relevant activities accordingly in an environmentally sound manner.

The objectives of the EMP are:

- ◆ to include all components of the various activities;
- ◆ to prescribe the best practicable control methods to lessen the environmental impacts associated with operations of the facility;
- ◆ to monitor and audit the performance of operational personnel in applying such controls; and
- ◆ to ensure that appropriate environmental training is provided to responsible operational personnel.

Bahnhof Service Centre may choose to implement an Environmental Management System (EMS) for its operations. An EMS is an internationally recognized and certified management system that will ensure ongoing incorporation of environmental constraints. At the heart of an EMS is the concept of continual improvement of environmental performance with resulting increases in operational efficiency, financial savings and reduction in environmental, health and safety risks. An effective EMS includes the following elements:

- ◆ A stated environmental policy which sets the desired level of environmental performance;
- ◆ An environmental legal register;
- ◆ An institutional structure which sets out the responsibility, authority, lines of communication and resources needed to implement the EMS;
- ◆ Identification of environmental, safety and health training needs;
- ◆ An environmental program(s) stipulating environmental objectives and targets to be met, and work instructions and controls to be applied in order to achieve compliance with the environmental policy; and
- ◆ Periodic (internal and external) audits and reviews of environmental performance and the effectiveness of the EMS.

2 THE IMPLEMENTATION OF THE EMP

Table 1 and Table 2 outline the management of the environmental elements that may be affected by the different activities. This document act as a guideline for the EMP to be established by the proponent. Impacts addressed and mitigation measures proposed are seen as minimum requirements which have to be elaborated on. Delegation of mitigation and reporting activities should be determined by the proponent and included in the EMP. The EMP is a living document that must be prepared in detail, and regularly updated, by the proponent as the project progress and evolve.

The EMP and ECC must be communicated to the site managers. All monitoring results must be reported on as indicated. These are important for any future renewals of the environmental clearance certificate and must be submitted to the Ministry of Environment, Forestry and Tourism on a bi-annual basis.

Table 1. Planning for Continued Operations and Future Decommissioning of the Project

Activity	Objective	Action	Timing	Proof of Compliance	Responsible Body
Compliance	To comply with all legal requirements for the operations of the facility in Namibia.	Apply for or renew the necessary permits from the various ministries, local authorities and any other bodies that governs the operations of the proposed activity. Finalise negotiations and resolve any outstanding issues, if any, over the allocation of user rights and zoning of the property on which the proposed activity will be located.	Continuously during the operational phase	All contracts, permits, certificates and other legal documents on file.	Proponent
Appointments	To appoint reputable contractors and operational personnel and establish the EMP, a legal requirement that forms part of the contract with contractors and employees.	Appoint contractors and employees and enter into an agreements which includes the EMP. Ensure that the contents of the EMP are understood by contractors, sub-contractors, employees and all personnel who will be present on site.	Continuously during the operational phase	Contracts on file	Proponent; Contractor
Management	Establish a management system to implement and monitor Health, Safety and Environment.	Make provisions to have a Health, Safety and Environmental Coordinator to implement the EMP and oversee occupational health and safety as well as general environmental related compliance at the site. Have the following emergency plans, equipment and personnel in place to deal with all emergencies: EMP, risk management plans, emergency response plans and HSE manuals. Adequate protection and indemnity insurance cover for incidents. Comply with the provisions of all relevant safety standards including SANS.	Continuously during the operational phase	Documentation on file Personal Protection Equipment (PPE) on site Signage related to restricted areas, dangerous areas, and PPE requirements on site Emergency response material on site	Proponent; Contractor

Activity	Objective	Action	Timing	Proof of Compliance	Responsible Body
Restoration Fund/Insurance	To establish a fund/insurance for future environmental restoration or pollution remediation if ever required.	Procedures, equipment and materials required for emergencies. To establish a fund for future ecological restoration of the project site should project activities cease and the site is decommissioned and environmental restoration or pollution remediation is required.	Continuously during the operational phase	Financial statements of restoration fund/insurance	Proponent; Independent Specialist Consultant
Reporting	To establish a reporting system to report on monitoring and compliance aspects of operations as outlined in the EMP.	Establish a reporting system to report on aspects operations as outlined in the environmental management plan. Keep monitoring reports on file for bi-annual submission to the Ministry of Environment, Forestry and Tourism in support of ECC renewal applications. This is a requirement by the Ministry.	Continuously during the operational phase	Monitoring Reports	Proponent; Contractor
Environmental Clearance Renewal	To renew the ECC every three years.	Appoint a specialist environmental consultant to update the EIA and EMP and apply for renewal of the ECC.	Prior to expiry of ECC	Renewed ECC	Proponent; Independent Specialist Consultant

Table 2. The Operational Phase

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Enhanced skills and technology to transfer to Windhoek and subsequent promotion of economic development	People need skills to perform their jobs. The technology to do something is often not found locally. Development of people and technology are key to economic development.	Skills development and improvement programs to be made available as identified during performance assessments. Employees to be informed about parameters and requirements for references upon employment. The proponent must employ Namibians where possible. Deviations from this practise should be justified appropriately.	Proof of appointment of local contractors on file.	Proponent
Demographic and Profile Community Health	New and existing developments attract people who seek work. This in turn can increase the extent of informal settlements and its associated problems. The increased trucking and distribution of goods from Windhoek could contribute to the spread of HIV / AIDS. It is possible that these can affect property prices in the area depending on the proximity to a residential site.	Restricted employment for Windhoek residents only should be practiced. Deviations from this practice should be justified appropriately. Training of local people should be considered from the start. These measures will reduce the influx of newcomers to the town and thereby reduce growth in the informal settlement and maintain property prices.	Proof of appointment of local contractors on file.	Proponent
Employment	An increase of skilled and professional labour has and will continue to take place due to the operations of the facility.	The proponent must employ local Namibians where possible. If the skills exist locally, employees must first be sourced from the town, then the region and then nationally. Deviations from this practice must be justified	Bi-annual summary report based on employee records.	Proponent
Secure Fuel Supply	The operation of the facility will aid in securing fuel supply to locals, travellers and the transport industry.	Regular tank dips and fuel volume reconciliation to ensure fuel is ordered before it is depleted. Plan in advance for peak tourist seasons and holidays when the demand for fuel increase.	Fuel volume reconciliations on file.	Proponent
Traffic	Traffic impacts during periods of fuel delivery or when more clients are expected such as when fuel price increases are announced.	Tanker trucks delivering fuel should not be allowed to obstruct any traffic in Mandume Ndemufayo Avenue or Bahnhof Street. If any traffic impacts are expected, traffic management	Any complaints received regarding traffic issues as well as corrective action taken should be recorded.	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Fire Hazards	<p>Products kept on site are flammable and therefore a fire risk exists. Unleaded petrol is a static accumulator and can ignite if not handled correctly.</p>	<p>should be performed to prevent these.</p> <p>Ensure that enough pump attendants are on duty when and increased number of clients are expected to visit the facility to refuel.</p> <p>All fire precautions and fire control at the site must be in accordance with relevant SANS regulations or better. Firefighting measures as per the Material Safety Data Sheets of the products should be adhered to.</p> <p>All operational personnel must be trained in the correct handling of fuel, especially unleaded petrol, and correct refuelling techniques. This includes only filling approved containers with fuel and earthing of such containers to prevent static build-up and ignition of unleaded petrol.</p> <p>In addition to this, all personnel have to be sensitised about responsible fire protection measures and good housekeeping such as the removal of flammable materials including rubbish and dry vegetation. Regular inspections should be carried out to check for these materials at the site.</p> <p>A holistic fire protection and prevention plan is needed. This plan must include an emergency response plan, firefighting plan and spill recovery plan.</p> <p>Experience has shown that the best chance to rapidly put out a major fire is in the first 5 minutes. It is important to recognise that a responsive fire prevention plan does not solely include the availability of firefighting equipment, but more importantly, it involves premeditated measures and activities to timeously prevent, curb and avoid conditions that may result in fires. An integrated fire prevention plan should be drafted. Special note must be taken of the regulations stipulated in sections 47 and 48 of the Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990).</p>	<p>A bi-annual report should be compiled of all incidents reported, complaints received and action taken.</p> <p>A bi-annual report should be compiled of all incidents reported. The report should contain dates when fire drills were conducted and when fire equipment was tested.</p>	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Health, Safety & Security	<p>Risks include work related injuries or exposures to harmful products, theft and sabotage.</p> <p>Fuel, especially unleaded petrol, is carcinogenic and dermal contact and breathing of fumes should be prevented.</p>	<p>Implement and maintain an integrated health and safety management system, to act as a monitoring and mitigating tool.</p> <p>Comply with all health and safety standards as specified in the Labour Act and related legislation.</p> <p>Clearly label dangerous and restricted areas as well as dangerous equipment and products.</p> <p>Lock away or store all equipment and goods in a manner suitable to discourage criminal activities (e.g. theft).</p> <p>Provide all employees with required and adequate personal protective equipment (PPE) where required.</p> <p>Ensure that all personnel receive adequate training on the operational procedures and the handling of hazardous substances.</p> <p>Train selected personnel in first aid and ensure first aid kits are available.</p> <p>The contact details of all emergency services must be readily available.</p> <p>Apply and adhere to all industry specific health and safety procedures and regulations applicable to the handling of hazardous substances.</p> <p>Treat all minor work related injuries immediately and obtain professional medical treatment if required.</p> <p>Assess any health and safety problems and implement corrective action to prevent future occurrences.</p>	<p>A report should be compiled every 6 months of all incidents reported. The report should contain dates when training was conducted and when safety equipment were inspected and maintained.</p>	Proponent
Noise	Noise will exist due to vehicles accessing the site to offload fuel or refuel.	The facility is situated in a commercial area so there is no restriction on the times of operation. It is important to refer and adhere to the City of Windhoek Council Resolution Guidelines 215/09/2006 with regards to noise emissions.	Any complaints received regarding excessive noise should be recorded with notes on action taken. All complaints and additional data, if available, to be compiled in a bi-annual	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Waste Production	Waste can be of domestic origin or hazardous waste that include contaminated materials such as packaging materials, contaminated soil, etc.	<p>Waste should be disposed of regularly and at appropriate disposal facilities.</p> <p>Products that can be re-used or re-cycled should be kept separate and treated as such.</p> <p>Due to the nature of some hazardous materials they should be disposed of appropriately and at an appropriately classified waste disposal facility. See the material safety data sheets available from suppliers if the user is not sure how to dispose of the substance.</p> <p>The oil water separator should be cleaned regularly and waste disposed of at a suitably classified hazardous waste disposal facility. No surfactants (soap) should be allowed to enter the separator as it will reduce its ability to separate the hydrocarbons from water.</p> <p>Liaise with the municipality regarding waste and handling of hazardous waste.</p>	<p>report.</p> <p>A register of hazardous waste disposal should be kept. This should include type of waste, volume as well as disposal method/facility.</p> <p>Any complaints received regarding waste should be recorded with notes on action taken.</p> <p>All data to be compiled in a bi-annual report.</p>	Proponent
Groundwater, Surface Water and Soil Contamination	Porous surface substrate can allow unwanted hazardous and ecologically detrimental substances to seep down to the water table.	<p>The following measures must be employed to prevent spillage into surface water drainage channels and groundwater sources:-</p> <ul style="list-style-type: none"> ● Spill control structures and cleaning procedures must be in place according to SANS standards or better and connection of all surfaces where fuel is handled with an oil water separator. ● The oil water separator should be cleaned regularly and waste disposed of at a suitably classified hazardous waste disposal facility. No surfactants (soap) should be allowed to enter the separator as it will reduce its ability to separate the hydrocarbons from water. ● All fuelling should be conducted on surfaces provided for this purpose. E.g. concrete slabs with regularly maintained seals between slabs. ● Proper training of operators must be conducted on a regular basis. 	<p>If a large spill has occurred or leakage is expected, samples must be taken from monitoring holes and analysed for any hydrocarbon pollutants present.</p> <p>A bi-annual report should be compiled of all spills or leakages reported. The report should contain the following information:</p> <ul style="list-style-type: none"> ● date and duration of spill ● product spilled ● volume of spill ● remedial action taken 	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
		<p>Mitigation</p> <ul style="list-style-type: none"> Any spillage of more than 200 l must be reported to the Ministry of Mines and Energy and remediation instituted. 	<p>Monitoring</p> <ul style="list-style-type: none"> Comparison of pre-exposure baseline data with post remediation data (e.g. soil hydrocarbon concentrations) Copy of documentation in which spill was reported to Ministry of Mines and Energy 	
Visual Impact	This is an impact that affects the aesthetic appearance.	Routine maintenance on infrastructure will ensure that the longevity of structures is maximised. However, it is important that the real integrity of the structures is considered in the long term and not just appearances.	A bi-annual report should be compiled of all complaints reported.	Proponent
Cumulative Impact	Possible cumulative impacts associated with the operational phase include increased risk of groundwater and soil contamination which can lead to the pollution of surrounding water sources as well as increased traffic and noise.	Addressing each of the individual impacts as discussed and recommended in the EMP would reduce the cumulative impact. Reviewing biannual reports for any new or re-occurring impacts or problems would aid in identifying cumulative impacts and help in planning if the existing mitigations are insufficient.	Bi-annual summary report based on all other impacts must be created to give an overall assessment of the impact of the Operational Phase.	Proponent

2.1 Decommissioning and Rehabilitation

Decommissioning is not foreseen during the validity of the ECC. Should decommissioning occur at any stage, rehabilitation of the area may be required. Decommissioning will entail the complete removal of all infrastructure including buildings and underground infrastructure. Any pollution present on the site must be remediated. The impacts associated with this phase include noise, waste production and pollution as structures are dismantled. Noise must be kept within City of Windhoek standards and waste should be contained and disposed of at an appropriately classified and approved waste facility and not dumped in the surrounding areas. Future land use after decommissioning should be assessed prior to decommissioning and rehabilitation initiated if the land would not be used for future purposes. The EMP for the facility will have to be reviewed and updated at the time of decommissioning to include preventative and mitigating measures specific to decommissioning activities and to cater for changes made to the site.

3 CONCLUSIONS

The EMP, if properly implemented, will ensure adverse impacts on the environment are continually mitigated and prevented. Where impacts occur, immediate action must be taken to reduce the escalation of effects associated with these impacts. To ensure the relevance of this document to the specific stage of project, it needs to be reviewed throughout all phases.

The EMP should continue to be used as an on-site reference document during all phases of the existing facility, and internal auditing should take place in order to determine compliance with the EMP. Parties responsible for transgression of the EMP should be held responsible for any rehabilitation that may need to be undertaken. The proponent could use an in-house Health, Safety, Security and Environment Management System in conjunction with the EMP. All operational personnel must be taught the contents of these updated documents.

Monitoring reports must be submitted to the Ministry of Environment, Forestry and Tourism every six months to allow for future renewal applications for the ECC.

4 REFERENCES

Brews L, Botha P, Faul A. 2016. Environmental Impact Assessment for the Construction and operations of Bahnhof Service Centre's Fuel Retail Facility situated in Windhoek.