APP-007090

DECOMMISSIONING OF A BULK FUEL STORAGE FACILITY, WINDHOEK

DECOMMISSIONING PLAN

Assessed by:

Assessed for:

January 2026

Project:	**DECOMMISSIONING OF A BULK FUEL STORAGE, WINDHOEK: DECOMMISSIONING PLAN**

Report Version/Date	Final January 2026
Prepared for:	Vivo Energy Namibia P.O. Box 110 Windhoek Namibia
Lead Consultant	Geo Pollution Technologies (Pty) Ltd PO Box 11073 Windhoek Namibia
Main Project Team	**Pierre Botha** (B.Sc. Geology/Geography); (B.Sc. (Hons) Hydrology/Hydrogeology) **Johann Strauss** (BA. Geography/Psychology/Environmental Management)
Cite this document as:	Botha P, Strauss J; 2026 January; Decommissioning of a bulk fuel storage facility, Windhoek: Decommissioning Plan
Copyright	

TABLE OF CONTENTS

1 INTRODUCTION

Vivo Energy Namibia plans to decommission a bulk fuel storage facility on Erf 7997, which previously belonged to Engen Namibia and has since been acquired by Vivo Energy. This will entail the decommissioning of all existing infrastructure on site, followed by the construction and operation of a new LPG depot on Erf 7997. The Decommissioning Plan (DP) for the removal of infrastructure on Erf 7997 is presented in this report.

2 OBJECTIVES OF THE DP

The DP provides management options to ensure impacts of decommissioning are minimised. The DP 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.

3 IMPLEMENTATION OF THE DP

Section 3.1 outline the management of the environmental elements that may be affected by the different activities. Impacts addressed and mitigation measures proposed are seen as minimum requirements which have to be elaborated on by the client where required. Delegation of mitigation and reporting activities should be determined by the proponent and included in the DP. The DP is a living document that must be prepared in detail, and regularly updated, by the proponent as the project progress and evolve. The DP must be communicated to the site managers.

3.1 DECOMMISSIONING

The following section provide management measures for the decommissioning of the bulk fuel storage facility.

3.1.1 Planning

During the planning phase for decommissioning of the facility, it is the responsibility of the Proponent to ensure they are and remain compliant with all legal requirements. The Proponent must also ensure that all required management measures are in place prior to and during all phases, to ensure potential impacts and risks are minimised. The following actions are recommended for the planning phase and should continue during various other phases of the project:

- Notify the petroleum inspectors of the Ministry of Industries, Mines and Energy prior to decommissioning of the bulk fuel storage facility.
- Ensure that all necessary permits from the various ministries, local authorities and any other bodies that governs the decommissioning of the facility remains valid.
- Ensure all appointed contractors enter into an agreement which includes the DP. Ensure that the contents of the DP are understood by the contractors, sub-contractors and all personnel present or who will be present on site.
- Make provisions to have a Health, Safety and Environmental (HSE) Coordinator to implement the DP and oversee occupational health and safety as well as general environmental related compliance at the site.
- Have the following on-site to deal with all potential emergencies:
    - Risk management/mitigation/EMP/ Emergency Response Plan and HSE Manuals
    - Adequate protection and indemnity insurance cover for incidents;
    - Comply with the provisions of all relevant safety standards;
    - Procedures, equipment and materials required for emergencies.
- If one has not already been established, establish and maintain a fund for future ecological restoration of the project site.

3.1.2 Skills, Technology and Development

During decommissioning of the facility, training may be provided to a portion of the workforce. Skills will be transferred to an unskilled workforce for general tasks. Development of people and technology are key to economic development.

Desired Outcome: To see an increase in skills of local Namibians.

Actions

Enhancement:

- If the skills exist locally, contractors and employees must first be sourced from the town, region, and then nationally. Deviations from this practice must be justified.
- Employees to be informed about the parameters and requirements for references upon employment.
- The Proponent must employ Namibians where possible. Deviations from this practise should be justified appropriately.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Ensure that all training is certified or managerial reference provided (proof provided to the employees), inclusive of training attendance, completion and implementation.

3.1.3 Employment

Decommissioning of the facility is hinged on employment. Skilled and unskilled labour will be employed for the removal of the storage tanks and equipment and general earth works. Unskilled labour may be sourced locally while it is expected that skilled contractors within Namibia will be used for specialised work. The decommissioning phase will therefore contribute to employment creation.

Desired Outcome: Provision of employment to local Namibians.

Actions:

Mitigation:

- 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.

Mitigation:

- Educational programmes for employees on HIV/AIDs and general upliftment of employees' social status.
- Appointment of reputable contractors.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Employee records.

3.1.4 Demographic Profile and Community Health

The scale of the project is limited and it is not foreseen that it will create a change in the demographic profile of the local community. Community health may be exposed to factors such as communicable disease like HIV/AIDS as well as alcoholism / drug abuse, associated with possible foreign construction teams. An increase in foreign people in the area may potentially increase the risk of criminal and socially / culturally deviant behaviour. However, such trends are considered unlikely. Spills and leaks may present risks to members of the public.

Desired Outcome: To prevent the in-migration and growth in informal settlements and to prevent the spread of diseases such as HIV/AIDS.

Actions

Prevention:

- Employ only local people from the area, deviations from this practice should be justified appropriately.

Mitigation:

- Educational programmes for employees on HIV/AIDs and general upliftment of employees' social status.
- Appointment of reputable contractors.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Records of employee demographics and upliftment programmes.

3.1.5 Health, Safety and Security

Every activity that will be associated with the decommissioning phase is reliant on human labour and therefore will expose them to health and safety risks. Activities such as the operation of machinery and handling of hazardous chemicals (inhalation and carcinogenic effect of some petroleum products), will pose the main risks to employees. Security risks will be related to unauthorized entry, theft and sabotage.

Desired Outcome: To prevent injury, health impacts and theft.

Actions

Prevention:

- Develop emergency response plans for all possible health, safety and security impacts and appoint responsible personnel in key positions to activate and oversee such plans when required.
- Selected personnel should be trained in first aid, and a first aid kit must be available on-site. The contact details of all emergency services must be readily available.
- Clearly label dangerous and restricted areas as well as dangerous equipment and products.
- Provide all employees with the required and adequate PPE.
- Equipment on-site must be locked away or placed in a way that does not encourage criminal activities (e.g. theft).
- All health and safety standards specified in the Labour Act should be complied with.

Mitigation:

- For all emergency situations, the appropriate emergency response plan must be implemented as soon as possible in order to minimize the magnitude of impacts or prevent such impacts from developing into more severe impacts.
- Selected personnel should be trained in first aid and a first aid kits must be available on site. The contact details of all emergency services must be readily available.
- For security incidents, ensure proper reporting, investigation and follow-up actions to strengthen future prevention measures.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any incidents must be recorded with action taken to prevent future occurrences.

3.1.7 Traffic

Traffic flow to the site may increase during decommissioning and this may increase the risk of incidents and accidents.

Desired Outcome: Minimum impact on traffic and no transport or traffic related incidents.

Actions

Prevention:

- Erect clear signage regarding access and exit points at the facility.
- Clearly display restricted area warning signs.

Mitigation:

- If any traffic impacts are expected, traffic management should be performed to prevent these.
- The placement of signs to warn and direct traffic will mitigate traffic impacts.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any complaints received regarding traffic issues should be recorded together with action taken to prevent impact from repeating itself.

3.1.8 Fire

Decommissioning activities may increase the risk of the occurrence of fires especially where fuel remains in tanks or pipes. Fuel, especially unleaded petrol, is highly flammable and therefore presents a fire risk.

Desired Outcome: To prevent property damage, possible injury and impacts caused by uncontrolled fires.

Actions:

Prevention:

- Regular personnel training (firefighting, fire prevention and responsible housekeeping practices).
- Ensure adequate water supply is available on-site for firefighting purposes.
- 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).
- Follow SANS standards related to bulk fuel storage.

Mitigation:

- A holistic fire protection and prevention plan must be developed for the site, and it should specifically take into account flammable products stored on-site. This plan must include an emergency response plan, firefighting plan and a spill recovery plan and should have dedicated assigned personnel to oversee their development and implementation.
- Maintain firefighting equipment, good housekeeping and personnel training (firefighting, fire prevention and responsible housekeeping practices).
- For any fire-related emergency, the appropriate emergency response plan must be implemented as soon as possible in order to minimise the magnitude of impacts or prevent such impacts from developing into more severe impacts.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A register of all incidents must be maintained daily. This should include measures taken to ensure that such incidents do not repeat themselves.

3.1.9 Air Quality

During decommissioning ambient dust levels may increase and remaining fuel may reduce air quality locally. Prolonged exposure to fuel vapours may have carcinogenic effects.

Desired Outcome: To prevent health impacts related to reduced air quality.

Actions

Mitigation:

- Personnel issued with appropriate masks where excessive dust or vapours are present.
- A complaints register should be kept for any dust related issues and mitigation steps taken to address complaints where necessary e.g. dust suppression.
- Employees should be coached on the dangers of fuel vapours.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any complaints received regarding dust or fuel vapours should be recorded with notes on action taken.

3.1.10 Noise

Noise pollution may be generated due to heavy motor vehicles accessing the site and the demolition of existing infrastructure. Decommissioning activities are noisy by nature and may disturb nearby receptors.

Desired Outcome: To prevent any nuisance and hearing loss due to noise generated.

Actions

Prevention:

- Follow the Labour Act and Municipal Council of Windhoek: Noise Control Regulations - General Notice No. 77 of 2006 to prevent hearing impairment and a nuisance at nearby receptors.
- All machinery must be regularly serviced to ensure minimal noise production.
- Restrict construction activities that generate excessive noise to daytime working hours.

Mitigation:

- Hearing protectors as standard PPE for workers in situations with elevated noise levels.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Labour Act Health and Safety Regulations and the Municipal Council of Windhoek: Noise Control Regulations (Council Resolution 215/09/006).
- Maintain a complaints register.

3.1.11 Waste Production

Various waste streams will be produced during the decommissioning phase. Waste may include hazardous waste associated with hydrocarbon products such as contaminated soil and water. Waste will also include building rubble and discarded equipment contaminated by hydrocarbon products. Waste presents a contamination risk and when not removed regularly may become a fire hazard.

Desired Outcome: To reduce the amount of waste produced and prevent pollution and littering.

Actions

Prevention:

- Waste reduction measures should be implemented, and all waste that can be reused/recycled must be kept separate.
- Ensure adequate waste storage facilities are available.
- Train employees and contractors in proper waste segregation and handling procedures.
- Establish agreements with licensed waste contractors for collection and safe disposal.
- Ensure waste cannot be blown away by the wind.
- Prevent scavenging (human and non-human) of stored waste.

Mitigation:

- Waste should be disposed of regularly and at appropriately classified disposal facilities, which include hazardous material (empty chemical containers, contaminated rugs, paper, water and soil).
- Contaminated soil from spills during the decommissioning and construction phase should be excavated immediately and disposed of at an approved hazardous waste facility.
- See the MSDS available from suppliers for disposal of contaminated products and empty containers.
- Liaise with the town council regarding waste and the handling of hazardous waste.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A register of hazardous waste disposal should be kept. This should include the type of waste, volume, as well as disposal method/facility.
- Any complaints received regarding waste should be recorded with notes on action taken.

3.1.13 Groundwater, Surface Water and Soil Contamination

Fuel that remains in tanks and pipelines may spill and result in contamination of soil and groundwater during their removal. Heavy machinery with fuel or oil leaks or burst hydraulic pipes and fuel lines can contaminate the environment. Firefighting chemicals must be carefully selected to pose no to minimum risks to the environment. The usage of PFAS (per- and polyfluoroalkyl substances) -containing foams should be avoided.

Desired Outcome: To prevent the contamination of water and soil.

Actions

Prevention:

- All construction machines should be maintained to be in a good working condition during operation.
- Employ drip trays and spill kits during construction when on-site servicing/repairs of equipment are needed.
- Ensure all tanks and reticulation are free from fuel prior to their removal.
- The procedures followed to prevent environmental damage during service and maintenance, and compliance with these procedures, must be audited and corrections made where necessary.
- Usage of PFAS (per- and polyfluoroalkyl substances) -containing foams should be avoided.

Mitigation:

- Any spillage of more than 200 litre must be reported to the Ministry of Industries, Mines and Energy.
- Any spill must be cleaned up immediately.
- Any contaminated soil or water encountered must be removed and rehabilitated.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A report should be compiled bi-annually of all spills or leakages reported. The report should contain the following information: date and duration of spill, product spilled, volume of spill, remedial action taken, and comparison of pre-exposure baseline data (previous pollution conditions survey results) with post-remediation data (e.g. soil / groundwater hydrocarbon concentrations).

3.1.15 Cumulative Impact

Possible cumulative impacts associated with the decommissioning phase include increased traffic, dust and noise in the area.

Desired Outcome: To minimise all cumulative impacts associated with the facility.

Actions

Mitigation:

- Addressing each of the individual impacts as discussed and recommended in the DP would reduce the cumulative impact.

Responsible Body:

- Proponent
- Contractors

4 CONCLUSIONS

The DP should be used as an on-site reference document for all decommissioning activities. Parties responsible for transgression of the DP should be held responsible for any rehabilitation that may need to be undertaken. The Proponent should use/develop their own in-house safety, health and environmental policies and standards in conjunction with the DP. It is imperative that all personnel are taught the contents of these documents to ensure better environmental practises all round.