# APP-00 5568

# RENNIES CONSOLIDATED CONSUMER FUEL INSTALLATION ON ERF 2968, INDUSTRIAL AREA, WALVIS BAY

# ENVIRONMENTAL MANAGEMENT PLAN



Prepared by:



Prepared for:



Project:	DENNIES CONSOLIDATED CONSUME	DETEL INSTALLATION ON FOR 2000	
Trojecu	RENNIES CONSOLIDATED CONSUMER FUEL INSTALLATION ON ERF 2968,		
Damout Dates	INDUSTRIAL AREA, WALVIS BAY: ENVIRONMENTAL MANAGEMENT PLAN		
Report Date:	March 2025		
Prepared for:	Rennies Consolidated		
	A division of Manica Group Namibia (	Pty) Ltd	
	P O Box 1001		
	Walvis Bay.		
Lead Consultant	Geo Pollution Technologies (Pty) Ltd	TEL.: (+264-61) 257411	
	PO Box 11073	FAX.: (+264) 88626368	
	Windhoek		
	Namibia		
Main Project	André Faul		
Team:	(B.Sc. Zoology/Biochemistry); (B.Sc. (Hons) Zoology); (M.Sc. Conservation		
	Ecology); (Ph.D. Medical Bioscience)		
	Johann Strauss		
	(BA. Geography/Psychology/Environmental Management)		
Cite this	Faul A, Strauss J; 2025 March; Rennies Consolidated Consumer Fuel		
document as:	Installation on Erf 2968, Industrial Area, Walvis Bay: Environmental		
	Management Plan		
Copyright	Copyright on this document is reserved. No part of this document may be		
4.1.4.9	utilised without the written permission of Geo Pollution Technologies (Pty)		
	Ltd.		
Report			
Approval	111. 7		
Approvai	Must		
	Angary Tate		
		V	
	André Faul		
	Conservation Ecologist		

report is a true reflection of the information of Technologies. All material information in the polynomial in the polyno	representative of Rennies Consolidated, a division after that the project description contained in this which the Proponent provided to Geo Pollution assession of the proponent that reasonably has or sion or the objectivity of this assessment is fairly approved.
Signed at Walvishey	on the W day of April 2025.
Rennies/Consolidated	Business Registration/ID Number

# **TABLE OF CONTENTS**

2 ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS  3 ENVIRONMENTAL MANAGEMENT PLAN  3.1 PLANNING	. 1
3.1 PLANNING	. 1
3.1.1 Skills, Technology and Development 3.1.2 Revenue Generation and Employment 3.1.3 Demographic Profile and Community Health 3.1.4 Fuel Supply 3.1.5 Traffic	
3.1.2 Revenue Generation and Employment	5
3.1.3 Demographic Profile and Community Health 3.1.4 Fuel Supply 3.1.5 Traffic	. 6
3.1.4 Fuel Supply	. 7
3.1.5 Traffic	. 8
	10
3.1.6 Health, Safety and Security	
3.1.7 Fire	12
3.1.8 Air Quality	
3.1.9 Noise	
3.1.10 Waste production	
3.1.11 Ecosystem and Biodiversity Impact	
3.1.12 Groundwater, Surface Water and Soil Contamination	
3.1.13 Visual Impact	18
3.1.14 Cumulative Impact	
3.2 DECOMMISSIONING AND REHABILITATION	
3.3 ENVIRONMENTAL MANAGEMENT SYSTEM	20
LIST OF FIGURES	
FIGURE 1-1 PROJECT LOCATION	. 1
LIST OF TABLES	
TABLE 2-1 NAMIBIAN LAW APPLICABLE TO THE FUEL STORAGE FACILITY	. 2
TABLE 2-2 MUNICIPAL BY-LAWS, GUIDELINES AND REGULATIONS	
TABLE 2-3 STANDARDS OR CODES OF PRACTISE	
TABLE 2-4 RELEVANT MULTILATERAL ENVIRONMENTAL AGREEMENTS	

# 1 INTRODUCTION

Geo Pollution Technologies (Pty) Ltd was appointed by Rennies Consolidated (theProponent), a division of Manica Group Namibia (Pty) Ltd, to apply for renewal of their existing environmental clearance certificate (ECC-01982) for the consumer fuel installation one Erf 2968, Industrial Area, Walvis Bay (Figure 1-1). To renew the ECC, an updated environmental management plan (EMP) will be prepared for the continued operations of the consumer fuel installation. The facility has one aboveground 23 m³ diesel tank which is used to supply fuel to the Proponent's fleet vehicles. Operations of the facility ensure a reliable supply of fuel for operations. The facility is constructed and operated according to South African National Standards (SANS) requirements as prescribed by Namibian legislation.

The updated EMP will be used to apply for a renewed ECC in compliance with Namibia's Environmental Management Act (Act No 7 of 2007).

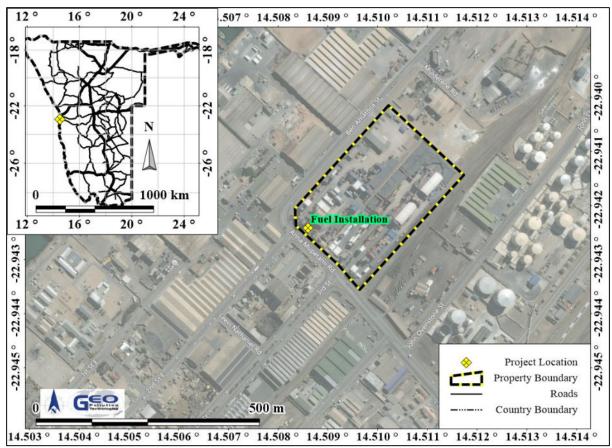


Figure 1-1 Project location

# 2 ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

To protect the environment and achieve sustainable development, all projects, plans, programmes and policies deemed to have adverse impacts on the environment require an environmental assessment, as per the Namibian legislation. The legislation and standards provided in to Table 2-1 and Table 2-4 govern the environmental assessment process in Namibia and/or are relevant to the facility.

Γable 2-1         Namibian law applicable to t           Law	Key Aspects
The Namibian Constitution	Promotes the welfare of people.
	• Incorporates a high level of environmental protection.
	• Incorporates international agreements as part of Namibian law.
<b>Environmental Management Act</b>	• Defines the environment.
Act No. 7 of 2007, Government Notice No. 232 of 2007	<ul> <li>Promotes sustainable management of the environment and the use of natural resources.</li> <li>Provide a process of assessment and control of activities with possible significant effects on the environment.</li> </ul>
Environmental Management Act Regulations	• Commencement of the Environmental Management Act.
Government Notice No. 28-30 of 2012	• List activities that requires an environmental clearance certificate.
	• Provide Environmental Impact Assessment Regulations.
Petroleum Products and Energy Act	Regulates petroleum industry.
Act No. 13 of 1990, Government Notice No. 45 of 1990	<ul> <li>Makes provision for impact assessment.</li> <li>Petroleum Products Regulations (Government Notice No. 155 of 2000).</li> </ul>
	<ul> <li>Prescribes South African National Standards (SANS) or equivalents for construction, operation and decommissioning of petroleum facilities (refer to Government Notice No. 21 of 2002).</li> </ul>
Water Resources Management Act	• Provides for management, protection, development,
Act No. 11 of 2013, Government Notice No. 1239 of 1947	<ul> <li>use and conservation of water resources</li> <li>Prevention of water pollution and assignment of liability.</li> </ul>
<b>Local Authorities Act</b>	• Define the powers, duties and functions of local
Act No. 23 of 1992, Government Notice No. 116 of 1992	<ul><li>authority councils.</li><li>Regulates discharges into sewers.</li></ul>
Public and Environmental Health Act	• Provides a framework for a structured more uniform
Act No. 1 of 2015, Government Notice No. 86 of 2015	public and environmental health system, and for incidental matters.
	• Deals with Integrated Waste Management including waste collection disposal and recycling; waste generation and storage; and sanitation.
Labour Act	♦ Provides for Labour Law and the protection and
Act No 11 of 2007, Government Notice No. 236	safety of employees.
of 2007	◆ Labour Act, 1992: Regulations relating to the health and safety of employees at work (Government Notice No. 156 of 1997).
Atmospheric Pollution Prevention	♦ Governs the control of noxious or offensive gases
Ordinance Ordinance No. 11 of 1976	• Prohibits scheduled process without a registration certificate in a controlled area.
	• Requires best practical means for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process.

Law	Key Aspects
Hazardous Substances Ordinance Ordinance No. 14 of 1974, Government Notice No. 2429 of 1972.	♦ Applies to the manufacture, sale, use, disposal and dumping of hazardous substances as well as their import and export.
	• Aims to prevent hazardous substances from causing injury, ill-health or the death of human beings.
Pollution Control and Waste Management	• Not in force yet.
Bill (draft document)	• Provides for prevention and control of pollution and waste.
	• Provides for procedures to be followed for licence applications.

Table 2-2 Municipal by-laws, guidelines and regulations

Municipal By-laws, Guidelines or Regulations	Key Aspects		
Integrated Urban Spatial Development Framework for Walvis Bay	• Overall vision to transform Walvis Bay to being the primary industrial city in Namibia.		
	• Aims to ensure that appropriate levels of environmental management is enforced for all developments in Walvis Bay.		
Integrated Environmental Policy of Walvis Bay (Agenda 21 Project)	♦ Indicates the directions that the Municipality of Walvis Bay will move towards in the forthcoming years to fulfil its responsibilities to manage the environment of Walvis Bay together with the town's residents and institutions.		
	• Strong focus on conservation and protection of environment.		

**Table 2-3** Standards or codes of practise

Standard or Code	Key Aspects
South African National Standards (SANS)	♦ The Petroleum Products and Energy Act prescribes SANS standards for the construction, operations and demolition of petroleum facilities.
	♦ SANS 10131 is specifically aimed at storage and distribution of petroleum products in aboveground storage tanks.
	<ul> <li>Provide requirements for spill control infrastructure</li> </ul>

Table 2-4 Relevant multilateral environmental agreements

Agreement	Key Aspects
Stockholm Declaration on the Human Environment, Stockholm 1972.	• Recognizes the need for a common outlook and common principles to inspire and guide the people of the world in the preservation and enhancement of the human environment.
1985 Vienna Convention for the Protection of the Ozone Layer	<ul> <li>Aims to protect human health and the environment against adverse effects from modification of the Ozone Layer are considered.</li> <li>Adopted to regulate levels of greenhouse gas concentration in the atmosphere.</li> </ul>
United Nations Framework Convention on Climate Change (UNFCCC)	♦ The Convention recognises that developing countries should be accorded appropriate assistance to enable them to fulfil the terms of the Convention.
Convention on Biological Diversity, Rio de Janeiro, 1992	• Under article 14 of The Convention, EIAs must be conducted for projects that may negatively affect biological diversity.
UN Convention for the Prevention of Marine Pollution from Land-based Sources	<ul> <li>Concerns itself with the protection of marine fauna and flora by preventing marine pollution from land-based sources.</li> <li>Contracted parties, are committed to take all possible steps to prevent pollution of the sea as well as the direct or indirect introduction of substances or energy by humans into the marine environment resulting in such adverse effects as harm to living resources and to marine ecosystems, hazards to human health, damage to services/ facilities or interference with other legitimate uses of the area.</li> </ul>

The project is listed as an activity requiring an ECC as per the following points from Section 9 of Government Notice No. 29 of 2012:

- 9.1 "The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974." (The consumer fuel installation store and handle hazardous substances in the form of fuel.)
- 9.2 "Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste." (The consumer fuel installation store and handle hazardous substances in the form of fuel which is permitted by the Ministry of Mines and Energy.)
- 9.5 "Construction of filling stations or any other facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin." (The Proponent has one aboveground tank)

# 3 ENVIRONMENTAL MANAGEMENT PLAN

Section 3 outline the management of the environmental elements that may be affected by the storage and handling of fuel. Impacts addressed and mitigation measures proposed are seen as minimum requirements which have to be elaborated on by the Proponent, where relevant. Delegation of prevention and mitigation measures as well as 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 site managers. A copy of the ECC and EMP should be kept on site. All monitoring results must be reported on as per the conditions of the ECC. Reporting is important for any future renewals of the ECC and must be submitted to the MEFT.

Various potential and definite impacts will emanate from the operations and decommissioning phases. The majority of these impacts can be prevented or mitigated to within acceptable limits. The following sections provide different management measures to be considered and implemented by the Proponent.

#### 3.1 PLANNING

During the phases of planning for continued operations and possible future decommissioning of the facility, it is the responsibility of 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:

- Ensure that all necessary permits from the various ministries, local authorities and any other bodies that governs all phases of the facilities are in place and remains valid. This includes the consumer installation certificates.
- Ensure all appointed contractors and employees enter into an agreement which includes the EMP. Ensure that the contents of the EMP are understood by the contractors, sub-contractors, employees and all personnel present or who will be present on site.
- 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 emergency plans, equipment and personnel on site where reasonable to deal with all potential emergencies.
- If one has not already been established, establish and maintain 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.
- Establish and / or maintain a six monthly reporting system to report on aspects of operations and decommissioning as outlined in the EMP.
- Submit six monthly reports to the Ministry of Environment and Tourism to allow for ECC renewal after three years. This is a requirement by Ministry.
- Appoint a specialist environmental consultant to update the EMP and apply for renewal of the ECC prior to expiry.

# 3.1.1 Skills, Technology and Development

Training is provided to a portion of the workforce to be able to operate and maintain various features of the fuel storage facility according to the required standards. Skills are transferred to an unskilled workforce for general tasks. Development of people and technology are key to economic development of the town, region and nationally.

**<u>Desired Outcome:</u>** To see an increase in skills of local Namibians, as well as development and technology advancements in the fuel industry.

#### Actions

#### **Enhancement:**

- If the skills exist locally, employees and contractors must first be sourced from the town, then the region and then nationally. Deviations from this practice must be justified.
- Skills development and improvement programs to be made available to employees as identified during performance assessments.
- Employees to be informed about parameters and requirements for references upon employment.

# Responsible Body:

- ♦ Proponent
- **♦** Contractors

- Record should be kept of training provided.
- Ensure that all training is certified or managerial reference provided (proof provided to the employees) inclusive of training attendance, completion and implementation.
- Bi-annual summary report based on employee training.

# 3.1.2 Revenue Generation and Employment

Operations of the facility relies on employment. Skilled and unskilled labourers are employed or contracted for various tasks of construction (upgrade and maintenance) and operations. Unskilled labour may be sourced locally while it is expected that skilled contractors within Namibia will be used for specialised work. The presence of the facility therefore contributes to employment creation in the skilled and unskilled labour sector. The availability of fuel contributes to the Proponent's effective operations and revenue is generated and paid to the national treasury.

<u>Desired Outcome:</u> Contribution to national treasury and provision of employment to local Namibians.

# **Actions**

#### **Enhancement:**

• 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.

## **Responsible Body:**

**♦** Proponent

#### **Data Sources and Monitoring:**

• Bi-annual summary report based on employee records.

## 3.1.3 Demographic Profile and Community Health

The project relies on labour for operations and construction activities. The facility is an existing facility and the scale of the project is limited and it is not foreseen that is has / will result in changes in the demographic profile of the local community. Exposure to factors such as communicable disease like HIV/AIDS, often associated with the transport industry, as well as alcoholism/drug abuse may impact the local community.

**<u>Desired Outcome:</u>** To prevent the in-migration and growth in informal settlements, prevent the spread of communicable disease and prevent / discourage socially deviant behaviour.

#### **Actions:**

#### **Prevention:**

- Employ only local people from the area, deviations from this practice should be justified appropriately.
- Adhere to all municipal by-laws relating to environmental health which includes but is not limited to sand and grease traps for the various facilities and sanitation requirements.

## Mitigation:

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

#### **Responsible Body:**

**♦** Proponent

- Facility inspection sheet for all areas which may present environmental health risks, kept on file.
- Bi-annual summary report based on educational programmes and training conducted.

# 3.1.4 Fuel Supply

The existing consumer fuel installation aid in securing fuel supply to the fleet and operational vehicles.

**Desired Outcome:** Ensure a secure fuel supply remains available.

# **Actions**

# Mitigation:

- Ensure compliance to the petroleum regulations of Namibia.
- Proper management to ensure constant supply.
- Record supply problems and take corrective actions.

# **Responsible Body:**

• Proponent

# **Data Sources and Monitoring:**

• Record supply problems and corrective actions taken and compile a bi-annual summary report.

#### 3.1.5 Traffic

The Proponent's general operations may increase traffic flow in the adjacent streets, especially 18<sup>th</sup> Road and Ben Amathila Street. However, the consumer fuel installation is not expected to result in increased traffic impacts as it will remain the Proponent's own fleet that make use of the facility and fuel deliveries will be infrequent. In turn, by providing diesel to fleet and operational vehicles at the site, where cargo is collected, the amount of trucks needing to refuel in town will be reduced, mitigating traffic impacts at the already congested fuel retail facilities in town.

**<u>Desired Outcome:</u>** Minimum impact on traffic and no transport or traffic related incidents.

#### **Actions**

#### **Prevention:**

• Erect clear signage regarding access and exit points at the facility.

#### Mitigation:

- Tanker trucks delivering fuel and trucks collecting fuel should not be allowed park in surrounding streets, outside of designated parking areas, or to obstruct any traffic of entrances / exists of facilities in surrounding streets.
- If any traffic impacts are expected, traffic management should be performed.
- The placement of signs to warn and direct traffic will mitigate traffic impacts.
- Trucks entering and existing the facility should not be allowed to make sharp turns on 18<sup>th</sup> Road and Ben Amathila Street, as this may result in traffic issues and damage to the road infrastructure.

#### **Responsible Body:**

Proponent

- Any complaints received regarding traffic issues should be recorded together with action taken to prevent impacts from repeating itself.
- A bi-annual report should be compiled of all incidents reported, complaints received, and action taken.

#### 3.1.6 Health, Safety and Security

Activities associated with the construction and operational phases are reliant on human labour and therefore exposes 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), poses the main risks to employees. Security risks are related to unauthorized entry, theft and sabotage.

**<u>Desired Outcome:</u>** To prevent injury, health impacts and theft.

## Actions

#### **Prevention:**

- All Health and Safety standards specified in the Labour Act should be complied with.
- Implement and maintain an integrated health and safety management system, to act as a monitoring and mitigating tool, which includes: colour coding of pipes, operational, safe work and medical procedures, permits to work, emergency response plans, housekeeping rules, MSDS's and signage requirements (PPE, flammable etc.).
- Clearly label dangerous and restricted areas as well as dangerous equipment and products.
- Equipment that will be locked away on site must be placed in a way that does not encourage criminal activities (e.g. theft).
- Provide all employees with required and adequate personal protective equipment (PPE).
- Ensure that all personnel receive adequate training on operation of equipment / handling of hazardous substances.
- Implementation of maintenance register for all equipment and fuel/hazardous substance storage areas.

## Mitigation:

- 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.
- Security procedures and proper security measures must be in place to protect workers and clients.
- Strict security that prevents unauthorised entry.

#### **Responsible Body:**

- Proponent
- ♦ Contractors

- Any incidents must be recorded with action taken to prevent future occurrences.
- A bi-annual report should be compiled of all incidents reported. The report should contain dates when training were conducted and when safety equipment and structures were inspected and maintained.

#### 3.1.7 Fire

Operational and maintenance activities may increase the risk of the occurrence of fires. The site is located in a developed area which may increases the difficulty of fighting fires. Although not as flammable as petrol, diesel is flammable and therefore presents a fire risk.

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

#### **Actions:**

#### **Prevention:**

- A holistic fire protection and prevention plan is needed. This plan must include an emergency response plan, firefighting plan and spill recovery plan.
- Maintain firefighting equipment, good housekeeping and personnel training (firefighting, fire prevention and responsible housekeeping practices).
- Ensure all chemicals are stored according to MSDS and SANS instructions.
- Maintain regular site, mechanical and electrical inspections and maintenance.
- Clean all spills / leaks.
- 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 for design, operation and maintenance of the facility, this includes refuelling locations and distances from boundaries.
- ♦ The Proponent should liaise with the local fire brigade to ensure that all fire requirements are met. This includes, but is not limited to SANS 10400 T: 2011.

# Mitigation:

• In case of a fire, the firefighting plan must be initiated immediately and all emergency procedures must be performed as practiced during training. This includes notifying the fire brigade and neighbouring operators, engaging emergency stops, using firefighting equipment, etc.

#### **Responsible Body:**

- **♦** Proponent
- **♦** Contractors

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

#### 3.1.8 Air Quality

Fuel vapours are released into the air during refuelling of the storage tank and as well as at the filling point. Prolonged exposure may have carcinogenic effects. Dust may be generated by vehicles accessing the site as well as during any construction activities.

**<u>Desired Outcome:</u>** To prevent health impacts and minimise the dust generated.

#### **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.
- Vent pipes must be properly placed as per SANS requirements.

# **Responsible Body:**

- **♦** Proponent
- Contractors

- Any complaints received regarding dust or fuel vapours should be recorded with notes on action taken.
- All information and reporting to be included in a bi-annual report.

#### 3.1.9 **Noise**

Construction (maintenance and upgrades) may generate noise. During operations, noise pollution will exist due to vehicles accessing the site to offload fuel or collect fuel. The facility is however situated in an industrial area with high ambient noise levels, thus noise impacts is not expected to negatively affect neighbouring receptors and is mostly related to hearing loss.

**<u>Desired Outcome:</u>** To prevent any nuisance and hearing loss due to noise generated.

#### **Actions**

#### **Prevention:**

- Follow Health and Safety Regulations of the Labour Act and/or World Health Organization (WHO) guidelines on maximum noise levels (Guidelines for Community Noise, 1999) to prevent hearing impairment and not to cause a nuisance at nearby receptors.
- ♦ All machinery must be regularly serviced to ensure minimal noise production.

#### Mitigation:

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

# **Responsible Body:**

- **♦** Proponent
- ♦ Contractors

- Health and Safety Regulations of the Labour Act and WHO Guidelines.
- Maintain a complaints register.
- Bi-annual reporting on complaints and actions taken to address complaints and prevent future occurrences.

# 3.1.10 Waste production

Waste is produced during the operational phase. Waste may include hazardous waste associated with the handling of hydrocarbon products etc. Domestic waste may be generated by the facility and related operations. Waste presents a contamination risk and when not removed regularly may become a fire hazard. Construction (maintenance) waste will be generated during the removal of the old tank, this may include building rubble and discarded equipment contaminated by hydrocarbon products such as removed bunding, reticulation and the old storage tank. Contaminated soil and water is considered as a hazardous waste.

<u>Desired Outcome:</u> 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 re-used / recycled must be kept separate.
- Ensure adequate disposal storage facilities are available.
- Ensure waste cannot be blown away by wind.
- Prevent scavenging (human and non-human) of waste.
- ♦ All regulation and by-laws relating to environmental health should be adhered to.

#### Mitigation:

- Waste should be disposed of regularly and at appropriately classified disposal facilities, this includes hazardous material (empty chemical containers, contaminated rugs, paper water and soil).
- Spill catchment areas / drip trays should be cleaned regularly and contaminated waste disposed of as hazardous waste.
- See the material safety data sheets available from suppliers for disposal of contaminated products and empty containers.
- Liaise with the municipality regarding waste and handling of hazardous waste.

#### **Responsible Body:**

- ♦ Proponent
- **♦** Contractors

- A register of hazardous waste disposal should be kept. This should include type of waste, volume as well as disposal method/facility.
- Any complaints received regarding waste should be recorded with notes on action taken.
- The spill catchment areas and equipment must be regularly inspected and all hydrocarbons removed once detected.
- All information and reporting to be included in a bi-annual report.

# 3.1.11 Ecosystem and Biodiversity Impact

The nature of the operational activities is such that the probability of creating a habitat for flora and fauna to establish is low. No significant impact on the biodiversity of the site is predicted as the site is currently void of natural fauna and flora. Bright lighting used at nigh may disorientate birds flying at night and cause collisions of birds with man-made structures. Impacts are therefore mostly related to pollution of the environment as well as impacts of bright lights on birds flying at night.

**Desired Outcome:** To avoid pollution of and impacts on the ecological environment.

#### Actions.

#### Mitigation:

- Report any extraordinary animal sightings to the Ministry of Environment and Tourism.
- Mitigation measures related to waste handling and the prevention of groundwater, surface water and soil contamination should limit ecosystem and biodiversity impacts.
- Prevent scavenging of waste by fauna.
- Direct all lights down to working surfaces and use minimal lighting at night.
- The establishment of habitats and nesting sites at the facility should be prevented where possible.

#### **Responsible Body:**

♦ Proponent

#### **Data Sources and Monitoring:**

• All information and reporting to be included in a bi-annual report.

#### 3.1.12 Groundwater, Surface Water and Soil Contamination

Operations entail the storage and handling of hydrocarbons (diesel) which present a contamination risk. Contamination may either result from failing storage facilities, or spills and leaks associated with fuel handling.

**<u>Desired Outcome:</u>** To prevent the contamination of water and soil.

#### **Actions**

#### **Prevention:**

- Spill control structures and procedures must be in place according to SANS standards or better on all areas where fuel is handled.
- All fuelling should be conducted on surfaces provided for this purpose. E.g. The use of drip trays / concrete slabs with regularly maintained seals between slabs.
- The procedures followed to prevent environmental damage during service and maintenance, and compliance with these procedures, must be audited and corrections made where necessary.
- Proper training of operators must be conducted on a regular basis (Fuel handling, spill detection, spill control).

#### Mitigation:

- Any fuel spillage of more than 200 litre must be reported to the Ministry of Mines and Energy.
- Spill clean-up means must be readily available on site as per the relevant MSDS.
- Any spill must be cleaned up immediately.
- The spill catchment traps and drip trays should be cleaned regularly and waste disposed of at a suitably classified hazardous waste disposal facility.

#### **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, comparison of pre-exposure baseline data (previous pollution conditions survey results) with post remediation data (e.g. soil/groundwater hydrocarbon concentrations) and a copy of documentation in which spill was reported to Ministry of Mines and Energy.

# 3.1.13 Visual Impact

This impact is not only associated with the aesthetics of the site, but also the structural integrity. The existing facility forms part of the industrial landscape associated with the area. The site should be kept clean, tidy and maintained to ensure it remains aesthetically pleasing and does not add the urban decay.

**<u>Desired Outcome:</u>** To minimise aesthetic impacts associated with the facility.

#### **Actions**

# Mitigation:

• Regular waste disposal, good housekeeping and routine maintenance on infrastructure will ensure that the longevity of structures are maximised and a low visual impact is maintained.

#### **Responsible Body:**

- **♦** Proponent
- **♦** Contractors

- A maintenance record should be kept.
- A report should be compiled of all complaints received and actions taken.

## 3.1.14 Cumulative Impact

Possible cumulative impacts associated with the operational phase include increased traffic in the area and possible hydrocarbon spills. The facility will have a negative cumulative impact on traffic flow on surrounding streets, it will however have a positive impact on traffic in other areas of town.

**<u>Desired Outcome:</u>** To minimise cumulative all impacts associated with the facility.

#### **Actions**

## Mitigation:

- Addressing each of the individual impacts as discussed and recommended in the EMP would reduce the cumulative impact.
- Reviewing biannual and annual 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.

# **Responsible Body:**

• Proponent

# **Data Sources and Monitoring:**

• Bi-annual summary report based on all other impacts must be created to give an overall assessment of the impact of the operational phase.

#### 3.2 DECOMMISSIONING AND REHABILITATION

Decommissioning is not foreseen during the validity of the ECC. Decommissioning was however assessed as construction activities include modification and decommissioning. 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, if any, not forming port of post decommissioning land use. Any pollution present on the site must be remediated. The impacts associated with this phase include noise and waste production as structures are dismantled. Noise must be kept within the Health and Safety Regulations of the Labour Act and WHO 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 at the time of decommissioning to cater for changes made to the site and implement guidelines and mitigation measures.

#### 3.3 ENVIRONMENTAL MANAGEMENT SYSTEM

The Proponent could implement an Environmental Management System (EMS) for their 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 would need to include 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.
- ♦ The EMP.