

APP-003094

**THE OPERATIONS OF A CONSUMER FUEL INSTALLATION
OF COCA-COLA NAMIBIA BOTTLING COMPANY SITUATED
IN WINDHOEK**

UPDATED ENVIRONMENTAL MANAGEMENT PLAN



Assessed by:



Assessed for:

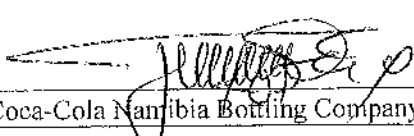


March 2024

Project:	UPDATED ENVIRONMENTAL MANAGEMENT PLAN FOR THE OPERATIONS OF COCA-COLA NAMIBIA BOTTLING COMPANY'S CONSUMER FUEL INSTALLATION IN WINDHOEK	
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Prepared for:	Coca-Cola Namibia Bottling Company PO Box 1435 Windhoek Namibia	
Lead Consultant	Geo Pollution Technologies (Pty) Ltd PO Box 11073 Windhoek Namibia	TEL.: (+264-61) 257411 FAX.: (+264) 88626368
Main Project Team	André Faul (B.Sc. Zoology/Biochemistry); (B.Sc. (Hons) Zoology); (M.Sc. Conservation Ecology); (Ph.D. Medical Bioscience) Ernest Pelsler (B.Sc. Zoology/Microbiology); (B.Sc. (Hons) Environmental Science); (M.Sc. Environmental Science)	
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I Clarence Jipangandjara acting as the representative of Coca-Cola Namibia Bottling Company (Pty) Ltd, hereby confirm that we approve the updated 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 12 day of April 2024.


Coca-Cola Namibia Bottling Company

668
Company Registration Number / ID

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1 INTRODUCTION

Coca-Cola Namibia Bottling Company (CCNBC) (the Proponent) requested Geo Pollution Technologies to update their existing environmental management plan (EMP) for the operations of their consumer fuel installation supplying fuel to their fleet of vehicles at their bottling plant in the Lafrenz Industrial area of Windhoek (Figure 1-1). General operations involve the receipt of fuel from road tankers, dispensing fuel to fleet vehicles and day to day administrative tasks. The updated EMP is based on the original environmental assessment conducted for the facility (Faul, Botha and Brews 2016).

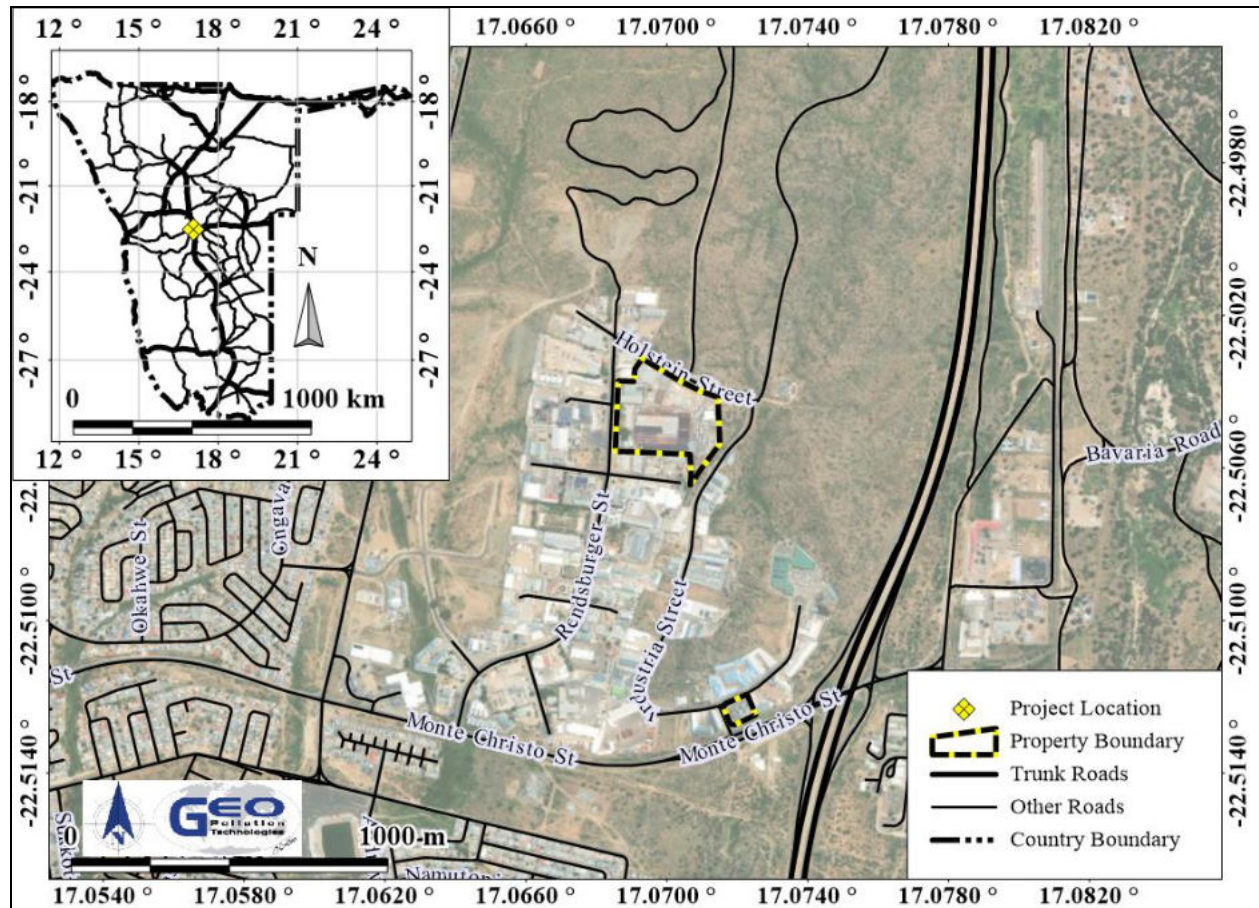


Figure 1-1 Project location

2 BRIEF PROJECT DISCRIPTION

The CCNBC factory in Windhoek is one of the major beverage factories in Namibia and plays an important role in supplying the local markets with a variety of beverages. As such it is a significant contributor to employment and generator of revenue. In order to ensure uninterrupted operations, CCNBC requires a consumer fuel installation to supply their own fleet of vehicles with fuel.

The CCNBC consumer fuel installation consist of two underground steel storage tanks of 23 m³ each. The tanks are for unleaded petrol and diesel respectively. Two pumps are situated on concrete slabs with a catchment pits to collect any spills. Fuel is received from tanker trucks approximately once a week and is stored in the underground storage tanks. Fuel is dispensed to fleet vehicles with the pumps as required. Weekly tank dips and reconciliation of fuel volumes are done to detect any possible leaks. Any spills are cleaned-up immediately and disposed of at an approved hazardous waste facility.

Potential direct benefits of the continued operations of the facility include:

- ◆ Continued and reliable supply beverages to local markets;
- ◆ Revenue generation and employment.

Potential indirect benefits of the continued operations of the facility include:

- ◆ Expansion of trade and industrial activity in the town and country as a whole;
- ◆ Encouragement of additional investments.

3 ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

The legislation provided in Table 3-1 to Table 3-3 are relevant to the project.

Table 3-1 Namibian law applicable of specific interest

Law	Key Aspects
The Namibian Constitution	<ul style="list-style-type: none"> ◆ Promotes the welfare of people ◆ Incorporates a high level of environmental protection ◆ Incorporates international agreements as part of Namibian law
Environmental Management Act Act No. 7 of 2007, Government Notice No. 232 of 2007	<ul style="list-style-type: none"> ◆ Defines the environment ◆ Promotes sustainable management of the environment and the use of natural resources ◆ Provides a process of assessment and control of activities with possible significant effects on the environment
Environmental Management Act Regulations Government Notice No. 28-30 of 2012	<ul style="list-style-type: none"> ◆ Commencement of the Environmental Management Act ◆ Lists activities that requires an Environmental Clearance Certificate ◆ Provides Environmental Impact Assessment Regulations
Petroleum Products and Energy Act Act No. 13 of 1990, Government Notice No. 45 of 1990	<ul style="list-style-type: none"> ◆ Regulates petroleum industry ◆ Makes provision for impact assessment ◆ Makes provision for licencing of fuel installations ◆ Petroleum Products Regulations (Government Notice No. 155 of 2000) <ul style="list-style-type: none"> ○ Prescribes South African National Standards (SANS) or equivalents for construction, operation and decommissioning of petroleum facilities (refer to Government Notice No. 21 of 2002)
Water Resources Management Act Act No. 11 of 2013	<ul style="list-style-type: none"> ◆ Provides for management, protection, development, use and conservation of water resources ◆ Prevention of water pollution and assignment of liability ◆ Water Resources Management Act Regulations of 2023
Local Authorities Act	<ul style="list-style-type: none"> ◆ Defines the powers, duties and functions of local

Act No. 23 of 1992, Government Notice No. 116 of 1992	<p>authority councils</p> <ul style="list-style-type: none"> ◆ Regulates discharges into sewers
<p>Public and Environmental Health Act</p> <p>Act No. 1 of 2015, Government Notice No. 86 of 2015</p>	<ul style="list-style-type: none"> ◆ Provides a framework for a structured more uniform 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.
<p>Labour Act</p> <p>Act No 11 of 2007, Government Notice No. 236 of 2007</p>	<ul style="list-style-type: none"> ◆ Provides for Labour Law and the protection and safety of employees ◆ Labour Act, 1992: Regulations relating to the health and safety of employees at work (Government Notice No. 156 of 1997)
<p>National Heritage Act</p> <p>Act No. 27 of 2004, Government Notice No. 287 of 2004</p>	<ul style="list-style-type: none"> ◆ Provides for protection and conservation of places and objects of heritage significance and the registration of such places and objects.
<p>Atmospheric Pollution Prevention Ordinance</p> <p>Ordinance No. 11 of 1976</p>	<ul style="list-style-type: none"> ◆ Governs the control of noxious or offensive gases ◆ 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
<p>Hazardous Substances Ordinance</p> <p>Ordinance No. 14 of 1974</p>	<ul style="list-style-type: none"> ◆ 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
<p>Pollution Control and Waste Management Bill (draft document)</p>	<ul style="list-style-type: none"> ◆ Not in force yet ◆ Provides for prevention and control of pollution and waste ◆ Provides for procedures to be followed for licence applications

Table 3-2 Relevant multilateral environmental agreements for Namibia

Agreement	Key Aspects
Stockholm Declaration on the Human Environment, Stockholm 1972.	<ul style="list-style-type: none"> ◆ 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 style="list-style-type: none"> ◆ Aims to protect human health and the environment against adverse effects from modification of the Ozone Layer are considered.
United Nations Framework Convention	<ul style="list-style-type: none"> ◆ Adopted to regulate levels of greenhouse gas

<p>on Climate Change (UNFCCC)</p>	<p>concentration in the atmosphere.</p> <ul style="list-style-type: none"> ◆ The Convention recognises that developing countries should be accorded appropriate assistance to enable them to fulfil the terms of the Convention.
<p>Convention on Biological Diversity, Rio de Janeiro, 1992</p>	<ul style="list-style-type: none"> ◆ Under article 14 of The Convention, EIAs must be conducted for projects that may negatively affect biological diversity.

Table 3-3 Relevant standards or codes

Standard or Code	Key Aspects
<p>South African National Standards (SANS)</p>	<ul style="list-style-type: none"> ◆ The Petroleum Products and Energy Act prescribes SANS standards for the construction, operations and demolition of petroleum facilities. ◆ SANS 10089-3:2010 is specifically aimed at storage and distribution of petroleum products at fuel retail facilities and consumer installations. <ul style="list-style-type: none"> ○ Provide requirements for spill control infrastructure

4 OBJECTIVES OF THE EMP

This EMP provides management options to ensure impacts of operations 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 both 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 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 the 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.

CCNBC implements the International Standards of Operation (ISO) 14001 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 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.

5 IMPLEMENTATION OF THE EMP

Section 4 outlines 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 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 environmental clearance certificate 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 bi-annually to the Ministry of Environment, Forestry and Tourism.

6 MANAGEMENT OF IMPACTS

6.1 Construction and Operations

The following section provides management measures for both the operational phase as well as construction activities related to the proposed operations of the consumer fuel installation. All monitoring results must be reported on as indicated.

6.1.1 Planning

During the phase of planning for future operations, construction (maintenance and upgrades) and 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 the construction (maintenance) activities and operations of the project remains valid. This includes the consumer installation certificate.
- ◆ 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 (HSE) 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 on site where reasonable 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 should project activities cease and the site is decommissioned and environmental restoration or pollution remediation is required.
- ◆ Establish and / or maintain a reporting system to report on aspects of construction activities, operations and decommissioning as outlined in the EMP.
- ◆ Submit bi-annual reports to the MEFT to allow for environmental clearance certificate renewal after three years. This is a requirement by MEFT.
- ◆ Appoint a specialist environmental consultant to update the EMP and apply for renewal of the environmental clearance certificate prior to expiry.

6.1.2 Skills, Technology and Development

This is mostly an indirect impact which is related to the maintenance of the installation and the operations associated with CCNBC. During various phases of the various activities, training is provided to a portion of the workforce. Skills are 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, as well as development and technology advancements in the fuel industry.

Actions

Mitigation:

- ◆ If the skills exist locally, 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 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.

Responsible Body:

- ◆ Proponent
- ◆ Contractors

Data Sources and Monitoring:

- ◆ 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 on all training provided.

6.1.3 Revenue Generation and Employment

The change in land use has led to changes in the way revenue is generated and paid to the national treasury. An increase of skilled and professional labour has and will continue to take place due to the operations of the CCNBC at their consumer fuel installation to remain effective. Employment is sourced locally while skilled labour/contractors may be sourced from other regions.

Desired Outcome: Contribution to national treasury and 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.

Responsible Body:

- ◆ Proponent

Data Sources and Monitoring:

- ◆ Bi-annual summary report based on employee records.

6.1.4 Demographic Profile and Community Health

The project is reliant on labour during the operational phase. The scale of the project is limited and it is not foreseen that it has, or 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 and alcoholism/drug abuse, associated with increased spending power of employees. An increase in foreign people in the area in search of employment may potentially increase the risk of criminal and socially/culturally deviant behaviour. However, such trends have not been observed since the site became operational which can be linked to the consumer fuel installation.

Desired Outcome: 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 sanitation requirements where applicable.

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:

- ◆ 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.
- ◆ Report and review of employee demographics.

6.1.5 Fuel Supply

The operation of the facility will aid in securing fuel supply to the fleet operations of CCNBC.

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 fuel volumes and supply problems and corrective actions taken and compile a bi-annual summary report.

6.1.6 Traffic

CCNBC itself may have increased traffic flow to the site, however the consumer fuel installation itself is not expected to result in traffic impacts since it is located on the CCNBC premises and fuel deliveries are infrequent.

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.

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

Data Sources and Monitoring:

- ◆ 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 actions taken.

6.1.7 Health, Safety and Security

Every activity associated with the operational phase is 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.

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

Actions

Prevention:

- ◆ 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.
- ◆ All Health and Safety standards specified in the Labour Act should be complied with.

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.
- ◆ Implement and maintain an integrated health and safety management system, to act as a monitoring and mitigating tool, which includes: operational, safe work and medical procedures, emergency response plans, housekeeping rules, MSDS's and signage requirements (PPE, flammable etc.).
- ◆ Security procedures and proper security measures must be in place to protect workers.
- ◆ Strict security that prevents unauthorised entry.

Responsible Body:

- ◆ Proponent
- ◆ Contractors

Data Sources and Monitoring:

- ◆ 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.

6.1.8 Fire

Operational and maintenance activities may increase the risk of the occurrence of fires. The site is located next to open fields with vegetation which may lead to the rapid spread of fires. 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:

- ◆ Ensure all fuel are stored and handled 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 maintenance of the facility.
- ◆ All dispensers must be equipped with devices that cut fuel supply during fires.
- ◆ Maintain a sufficiently wide firebreak around the property.

Mitigation:

- ◆ 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).

Responsible Body:

- ◆ Proponent
- ◆ Contractors

Data Sources and Monitoring:

- ◆ 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.

6.1.9 Air Quality

Fuel vapours are released into the air during refuelling of bulk storage tanks as well as at filling points. Prolonged exposure may have carcinogenic effects. Exhaust gasses of vehicles in surrounding streets, and on the site, reduces air quality and contributes to greenhouse gas emissions.

Desired Outcome: To prevent health impacts and minimise the dust generated.

Actions

Mitigation:

- ◆ Personnel issued with appropriate masks where excessive vapours are present.
- ◆ A complaints register should be kept for any air quality issues and mitigation steps taken to address complaints where necessary.
- ◆ Employees should be coached on the dangers of fuel vapours.
- ◆ Vent pipes must be properly placed as per SANS requirements.
- ◆ The Proponent's fleet vehicles must be serviced regularly and catalytic converters should be installed to reduce greenhouse gas emissions.

Responsible Body:

- ◆ Proponent
- ◆ Contractors

Data Sources and Monitoring:

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

6.1.10 Noise

Noise pollution will exist due to heavy motor vehicles accessing the site to offload or receive fuel. Construction (maintenance and upgrade) may generate excessive noise.

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

Actions

Prevention:

- ◆ Follow Labour Act and City of Windhoek guidelines on maximum noise levels to prevent hearing impairment.
- ◆ 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

Data Sources and Monitoring:

- ◆ Maintain a complaints register.
- ◆ Bi-annual report on complaints and actions taken to address complaints and prevent future occurrences.

6.1.11 Waste production

Various waste streams are produced during the operational phase. Waste may include hazardous waste associated with the handling of hydrocarbon products etc. Domestic waste is generated by the facility and related operations. Waste presents a contamination risk and when not removed regularly may become a fire hazard. Construction waste may include building rubble and discarded equipment contaminated by hydrocarbon products. Contaminated soil and water is considered as a hazardous waste.

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 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 storage.
- ◆ 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).
- ◆ 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

Data Sources and Monitoring:

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

6.1.12 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 area is predicted as operations is ongoing on the site and limited natural fauna and flora is present. Impacts are therefore mostly related to pollution of the environment.

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

Actions.

Mitigation:

- ◆ Report any extraordinary animal sightings to the Ministry of Environment, Forestry 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.
- ◆ 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.

6.1.13 Groundwater, Surface Water and Soil Contamination

Operations entail the storage and handling of various hydrocarbons which present a contamination risk. Contamination may either result from failing storage facilities, pumps and pipelines, or spills and leaks associated with overfilling or human error. Such spills may contaminate surface water, soil and groundwater.

The facility should be designed according to SANS standards, which aims at preventing spillages and leakages from entering the environment and contaminating soil or water.

Desired Outcome: 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 and connection of all surfaces where fuel is handled, with spill traps or an oil water separator.
- ◆ All fuelling should be conducted on surfaces provided for this purpose. E.g. 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 spillage of more than 200 litre must be reported to the Ministry of Mines and Energy as per permit conditions.
- ◆ Spill clean-up means must be readily available on site as per the relevant MSDS.
- ◆ Any spill must be cleaned up immediately.

Responsible Body:

- ◆ Proponent
- ◆ Contractors

Data Sources and Monitoring:

- ◆ Tank dips and fuel volume reconciliations should be performed daily in order to allow for timely detection of any leakages.
- ◆ 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.

6.1.14 Visual Impact

This is an impact that not only affects the aesthetic appearance, but also the integrity of the facility.

Desired Outcome: 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

Data Sources and Monitoring:

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

6.1.15 Cumulative Impact

Possible cumulative impacts associated with the operational phase include increased traffic in the area and along gravel roads, and potential groundwater contamination.

Desired Outcome: 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 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 report on all other impacts must be created to give an overall assessment of the impact of the operational phase.

6.2 Decommissioning and Rehabilitation

Decommissioning is not foreseen during the validity of the environmental clearance certificate. 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. 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 Labour Act and 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 at the time of decommissioning to cater for changes made to the site and implement guidelines and mitigation measures.

7 CONCLUSION

The EMP should continue to be used as an on-site reference document during construction and operations of the facility. Parties responsible for transgressing 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 documents. Monitoring reports must be submitted to the Ministry of Environment, Forestry and Tourism every six months (bi-annually) to allow for the future renewal of the ECC.

8 REFERENCES

Faul A, Botha P, Brews L. 2016. Environmental Impact Assessment for the Operations of Coca-Cola Namibia Bottling Company's Consumer Fuel Installation in Windhoek