

Guideline on WATER VENDING

2019





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FOREWORD



The Water Services Regulatory Board (WASREB) is the body mandated under the Water Act 2016 to determine and prescribe national standards for provision of water services to all citizens in the country. In particular, any purported potable water being provided to any customer at any location in the republic, is expected to strictly adhere to the prevailing water quality standards.

Water vending is the most common mode of water service provision to unserved customers both within pockets of regulated utilities and also outside, where there are no regulated utilities at all. It is appreciated that water vendors come in to supplement the existing water service provision gaps in the short to medium terms. However, in most cases quality concerns of the commodity become an issue. These concerns have to be addressed in order to mitigate against the negative effects on the health of customers and the environment. It is for this reason that WASREB saw the need to develop this Guideline on water vending in order for the sector to have sanity in the context of water safety planning value chain. It outlines different water vending systems, their risks assessment and also the appropriate control measures to be observed. The nature of water vending dictates that a multi-sectoral participatory approach be deployed.

The objective of this Guideline therefore, is to regulate the quality of water supplied to citizens by all actors beyond the utilities directly regulated by WASREB. This shall be achieved through formalization of water service provision by all water vendors who are on board, but are not formally regulated in any way. This is the requirement of the Water Act 2016.

For the regulators, it guides on;

1. Different modes of water vending as additional database
2. Downstream relationship licensing mechanism, hence sectoral orderliness
3. Instilled sense of self-regulation through vendor associations
4. Consumer protection through linkage of quality and safe water to approved tariff of licensed utilities

For the water utilities, it provides guidance on;

1. Inventorying of all water sources and vendors within their jurisdiction
2. Approval of all water sources being supplied in their territory

3. Harmonizing water tariffs in their areas, hence indirect consumer protection
4. Taking full responsibility on water quality indirectly supplied within their areas of jurisdiction, courtesy of their empowerment to randomly check, sample and test

For the water vendors, it guides on;

1. Taking responsibility for water quality for their potential continued stay in business
2. Potential equal business opportunities through moderated rates without undercutting
3. Bearing responsibility on their personnel health and hygiene
4. Formalization of vendors activities as part of the water sector's regulatory purview

There is hope that implementation of this Guideline by the utilities directly regulated by WASREB, shall ultimately ensure that water service standards shall be strictly adhered to in terms of quality, cost and customer service, in addition to guaranteeing the health and safety of all consumers.



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ABBREVIATIONS

CoK	Constitution of Kenya
NWSS	National Water Services Strategy
TSS	Total Suspended Solids
WRA	Water Resource Authority
WSP	Water Safety Plan
WASREB	Water Services Regulation Board

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1. INTRODUCTION

1.1 Background

The 2016 WASREB Impact Report estimates that 45% of the population in Kenya still has no access to piped water within easy reach. With a piped water supply coverage ranging from 40% to 80% in most utility areas, the role of vended water in meeting the demand deficit cannot be underrated. Water vending can be defined as the formal or informal reselling or onward distribution of utility water, or water from other sources by small-scale vendors for domestic use. Formal vendors include water utilities, registered associations, and small-scale informal suppliers. They supply treated water in tankers and water kiosks and may be easier to regulate. Informal vendors tend to supply both treated and untreated water usually in small quantities using containers carried on hand/donkey drawn carts. These may be more challenging to regulate.

The inefficiency and general inability to supply the present demand by utilities due to increased population translating to an increased demand with a constant water supply has led to a growing number of un-served consumers. These consumers depend on the non-piped water supply for their water needs hence water vending has become common, taking various forms such as tankers, donkey and human drawn carts, water points (springs and wells) and water kiosks. These are the main water vendors found in almost all the 28 utilities visited during the water quality surveillance undertaken in the month of May 2018. It was however, noted that the quality of the water provided by some water vendors is not guaranteed as the sources cannot be ascertained. The sources include utility water supply, springs, boreholes, rivers, rain water catchment, shallow wells, dams, water pans, wetlands, among others. The quality of most of these sources is poor posing a hazard to public health, as the water is usually untreated. Even where the vendors obtain water from water kiosks supplied by some utilities, the handling is not regulated and hence the safety cannot be ascertained.

1.2 Status of Vended Water Quality

As aforementioned, the quality of vended water cannot be guaranteed. This is because the vendors get water from any available source without regard to its quality. The methods of handling the water during abstraction, storage and transport provide very many pathways to contaminants thus exposing consumers to health risks. The sector is operated in a haphazard manner due to lack of regulation. For consumers, the only quality standard that the water has to pass to be perceived to be of good quality is that of turbidity (which majority of users regard as colour of the water) and that of taste. However, during the surveillance carried out in various utilities, it was observed that most of the vended water was of poor quality bacteriologically and physico-chemically. Test results of sampled water kiosks supplying treated water from various utilities indicate that nearly 50% of them (11 out of 25) were non-compliant with the Total Suspended Solids (TSS) standard. The TSS standard specified is “nil” or “not detectable” yet the results from the eleven utilities’ water kiosks were in the range 0.25 to 18.5 mg/l. The non-piped water sources (shallow wells, springs and boreholes) are slightly more mineralized and in many cases have bacteriologically poor-quality water. In twelve (including Kisumu, Eldoret, Mombasa, Kilifi-Mariakani, Kwale, Muranga, Gatamathi, Machakos, Kapsabet-Nandi, Embe, Naivasha, and Eldama Ravine) out of the 28 utility areas, the non-piped sources were bacteriologically non-compliant. The exception was found in a few sources in three utility areas of Nakuru Rural, Kisii, and Ruiru-Juja whose quality was bacteriologically and chemically compliant. Fluoride was within limits except for Kibra in Nairobi (10.3 mg/l) while nitrates were found to be low (Kisumu and Kakamega; 11-13 mg/l) to high (Muranga, Meru, Malindi, and Kilifi; 23-37 mg/l).

The unsatisfactory quality of vended water has been associated with outbreaks of diarrheal diseases e.g. in Kihoto village of Naivasha where the outbreaks are perennial. It is thus clear that a lot needs to be done in terms of regulation of the vended water quality in order to ensure that the health of the public who rely on the water is safeguarded.

1.3 Legal and regulatory framework on water vending

A robust legal and regulatory framework is necessary in order to ensure the safety of vended drinking water and thus protection of the health of the general public who use this water. Water vending largely remains a

grey area as there is no sector specific policy in place for regulation hence the law governing the sector is inferred from the existing frameworks given below that guide the water sector in Kenya.

1.3.1 The Constitution of Kenya (COK) 2010

The right to clean and safe water in adequate quantities is enshrined in the COK 2010 Section 43 (1) (d). The Ministry responsible for water has revised the principal water legislation (Water Act 2002) and policy (Sessional Paper No.1 of 1999 on the National Policy on Water Resources Development and Management) to align them to the constitutional right to clean and safe water as well as to other requirements such as the devolved system of government. As a result, the Water Act 2016 was operationalized in April 2017 while the Draft Sessional Paper on the National Water Policy 2018 (5th version) is at an advanced stage of development. With a low percentage of drinking water supply coverage in Kenya averaging 60% in the 28 utilities studied, vended water plays a vital role in addressing the right to water. It is necessary that its safety is ensured.

1.3.2 Sessional Paper No.1 of 1999 on the National Policy on Water Resources Management and Development

It called for de-centralization of operational activities from the central government to other actors, including local authorities, the private sector and increased communities' involvement in order to improve efficiency in service delivery. The policy tackled issues pertaining to water supply and sanitation facilities development, institutional framework and financing of the sector. To enable sustainable water supply and sanitation services, there is need to apply alternative management options that are participatory through enhanced involvement of other stakeholders in the provision of these services. Formal and informal water vendors, therefore, are some of the stakeholders for water provision.

1.3.3 Draft sessional Paper on National Water Policy 2018

The Policy proposes a broad range of measures and actions responding to key water issues and challenges. It seeks to provide the framework for an integrated approach to planning and sustainable development & management of water resources in the country and progressive realization of the human rights on water, sanitation and environment.

1.3.4 Water Act of Kenya 2016

The Water Act 2016 is an Act of Parliament meant to provide for the management, conservation, use and control of water resources and for the acquisition and regulation of rights to use water (GoK 2016). The enactment of The Water Act 2016 repealed the Water Act 2002.

1.3.5 WASREB – Water Safety Planning Guideline 2018

The Water Safety Planning Guideline 2018 by WASREB introduces the aspect of a holistic approach to ensuring water safety. The guideline are aimed at ensuring all water utilities develop and implement Water Safety Plans (WSP) so as to ensure that the drinking water that gets to the consumers is not only of the good quality but it is also safe for consumption. The guideline propose that water vending should be part and parcel of water safety planning since it constitutes a large percentage of drinking water supply. The guideline give a step by step approach on how to identify risks and contaminant pathways within water supply systems and how to put in place monitoring and control measures to ensure water safety.

1.3.6 WASREB – Model Water Services Regulations 2007

The regulations were created pursuant to Section 47(k) of the Water Act 2002. Part VII of the document outlines the regulations on the vended water (potable) and non-piped water supplies.

Regulation number 70 (1) on licensing of boreholes (potable water services) states that:

“Borehole owners shall register with the Water Services Board, and shall upon approved water quality tests be licensed by the Water Services Board as a potable water vendor in accordance with conditions to

be prescribed by the water service board, under guideline issued by the regulator (WASREB) and provided that the contracted Water Service Provider has no capacity to supply the area in question”

The guideline on water vending proposed in this document is, part of WASREB’s policy; to give direction in ensuring safety of vended water.

1.3.7 National Water Services Strategy (MWI, 2008)

The National Water Services Strategy (NWSS) was aimed at implementing the water sector policy contained in Sessional Paper No. 1 of 1999 on National Policy on Water Resources Management and Development. The NWSS provides a clear, accountable, and transparent road map to implement sector policy to improve health, jobs and wealth for all Kenyans.

1.4 Existing initiatives in regulating vended water.

Only a few utilities have in place systems to ensure water vendors supply clean and safe water. This has been done through working with the county public health department who license these water vendors and by testing the water quality from the vendors randomly to ensure it meets the required standards. WASREB has issued official water tariffs to all water utilities which includes rates for the price of water at water kiosks and utility water tankers. However, once the other vendors buy the water from either the kiosks or the utility tankers and factor in their transportation costs, the price becomes unregulated.

Some of the utilities that have tried to regulate water vending and to a large extent have been successful include Kisumu and Kakamega water and sanitation companies. Kisumu has liaised with the County Government Public Health Department to ensure all water tankers and their operators are licensed and have the necessary credentials to show that they are water quality and safety compliant. The utility also has a central place where all tankers buy water for supply. On arrival the tanker’s details and those of the driver are checked and recorded including where the water is to be supplied. Once the tanker is filled up, water samples are taken from it and tested to ensure no contaminants are present in the tank.

Kakamega on the other hand inspects, cleans and disinfects the tankers before licensing them. One of the conditions in place for licensing of the tankers is that they must get their water from a hydrant at the utility office. Random quality checks are carried out on water from the tankers and disinfection done every three months.

These two cases serve to show that regulation of water vending is actually possible with the right policies in place. However, tankers are just a minor facet of the water vending sector and a lot more needs to be done to ensure the safety of all vended water.

PART 1: WATER VENDING SYSTEMS

Before any system can be successfully regulated, the system has to be understood. In order to understand the system, there is need to break it down into its various components and deal with the issues at each level. Part 1 of this water vending guideline seeks to give a better understanding of the various water vending systems which include water kiosks, water tankers, hand and donkey drawn carts and water points. The systems will be broken down, typical risks and contaminant pathways within the system will be identified and some control measures given. It should be noted that the conditions vary from one area of jurisdiction to the next and hence area specific regulations can be developed to reinforce these guideline. This guideline should be used in conjunction with reference to the WASREB Water Safety Planning Guideline 2018 which provide more details on water safety planning.

2. DESCRIPTION OF THE WATER VENDING SYSTEMS

Common water vending systems in Kenya consist of water kiosks, water tankers, hand and animal drawn carts and water points. It is worth noting that there is segmentation of the chain of distribution from wholesale, distribution and retailing vendors. Wholesale vendors sell their water in bulk to other vendors and may include utility water kiosks, boreholes and water tankers. Distributions vendors, mainly water tankers, buy water from wholesalers and sell it to other vendors. Retailing vendors buy water from either wholesale or distribution vendors and sell it directly to the consumers. All water vendors are interlinked in a cyclic web where any vendor can be a wholesale, distribution or retailing vendor depending on who they are selling their water to. These systems are described in this section.

2.1. Water Kiosks

Water kiosks are by far the most common form of water vending in Kenya. The kiosks are either utility owned, community owned or privately owned. The water sources for water kiosks are varied but majorly include piped utility water and boreholes. The kiosks sell water to consumers either directly, and they must come for it using their own containers, or indirectly through other vendors who ferry it to the consumer's premises.

There were three main types of water kiosks which were identified during the surveillance visits:

- (i) Masonry walled kiosks with reinforced concrete roof slab for holding the water storage tank (usually a u-PVC water tank of capacity 5m³ or 10m³). This is the most common utility-owned water kiosk originally developed by WSTF and is also the recommended water kiosk by WASREB.
- (ii) Masonry walled kiosks roofed with ordinary GCI roofing sheets. These are either utility-owned, community-owned or privately owned. For these types of kiosks there is no provision for an elevated water storage tank available. In some cases however, there might be a 5m³ or 10m³ u-PVC water storage tank mounted on a steel tower platform next to the water kiosk.
- (iii) Communal stand pipes. These are usually either ½ inch or ¾ inch GI standpipes connected to a water distribution pipeline, at a designated area within the neighborhood from where the community members can fetch their water for domestic use. These are mostly community-owned or privately owned.

There could other forms of water kiosks which are basically variants of the above three. These include the water kiosks located within eco-toilets, either community-owned, utility-owned or privately owned.

Figure 1 and 2 below show typical water kiosks. The first one is a utility owned kiosk (Naivasha Water and Sanitation Company) while the second is a privately-owned kiosk in Baruti, Nakuru getting its water from a borehole.



Figure 1: Utility-owned water kiosk in Naivasha

Figure 2: Private borehole water kiosk in Nakuru

The water kiosk vending system is a simple system that basically involves a source (piped or borehole), a storage tank and a means of transfer of the water into the customer’s container which is usually a tap with a hose pipe extension. The water storage is in most cases an elevated tank mounted on top of the water kiosk. Some kiosk vendors however do not store the water but vend it directly from the piped source. The figure below shows a simple description of the water kiosk vending system.



Figure 3: typical water kiosk vending system.

2.2. Water Tankers

Water tankers are a very common form of water vending in most urban areas of Kenya. They are basically vehicles fitted with water tanks with a capacity of up to 16m³ which are used to deliver water to the consumer premises. The tankers mainly serve the middle and upper classes of the population who can afford the higher prices charged and have large storage tanks at their premises. However, tankers may also be used in low income areas to fill up storage tanks at water kiosks when there is no flow as a pro poor strategy for sustaining service levels. They may be either utility owned or privately owned.

The sources of water for tankers are also varied but the most common include utility water, either from designated points or illegally from hydrants, and private boreholes. Depending on the water pressure from the source, the tankers may require a pumping mechanism to fill via a hosepipe. Once filled the tanker delivers the water to the consumer point and depending on the amount required by the consumers, the tankers can serve several consumers before going back for a refill. Again, pumps and hoses will be used as most of the consumer tanks are usually elevated. Figures 4 to 6 show some water tankers operating within some utilities and a schematic of a water tanker vending system.



Figure 4: private tankers at Little Narok Water Company.



Figure 5: Eldoret water and sanitation company water tanker



Figure 6: Typical water tanker vending system

2.3. Hand or donkey drawn carts

These vendors are very common in rural and semi-urban areas and other areas of the lower income bracket. The vendors basically use carts to transport and sell water in 20 L Jerri cans or sometimes drums and small tanks. The carts are either human powered or animal (donkey) powered. They are very popular as they are quite affordable and deliver water to the doorstep in whatever quantities the consumer wishes. This saves the consumer the time and energy they would otherwise have used in getting the water themselves from the available source.

Handcart and donkey drawn cart vendors get water from any available sources e.g. water kiosks, wells, springs, boreholes, rivers, dams, water pans etc. They are by far the hardest vendors to regulate since they sell water in small quantities whose sources may not be immediately easy to establish. The containers are usually either filled while on the cart using a hosepipe or on the ground before being loaded onto the cart. At the consumers premises the containers are emptied directly into the storage containers or tanks. The figures below show examples of hand and donkey drawn cart water vending and the vending system schematically.



Figure 7: Hand cart vendor

Figure 8: Donkey drawn cart

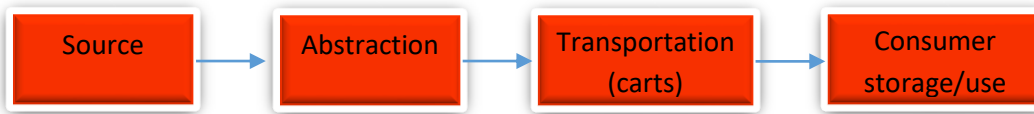


Figure 9: Typical water tanker vending system

2.4. Water Points (shallow wells and springs)

These vendors are mainly found in the rural areas and lower income areas of urban areas. They mainly include shallow wells and springs from which people can draw water at a fee. The shallow wells do not require permits and are hand dug where the water table is high. A high water table coupled with the sanitary conditions in the low income areas poses water safety problems for consumers of this water hence some form of treatment may be required. The water from the wells is usually drawn using a container attached to a rope that is lowered into the well and lifted either by hand or a mechanical winch contraption.

Springs on the other hand are naturally occurring and if well protected the water is safe to use with no further treatment required. The springs are usually run by the community, government or individuals in cases where the spring is located within private land. Some form of protection head work is usually done, and a pipe fitted to make it easier to draw the water using containers. The two water points are shown in the figures below.



Figure 10: Shallow well in the Kisumu



Figure 11: A spring in Kisii county

3. SYSTEM RISK ASSESSMENT - IDENTIFICATION OF HAZARDS AND HAZARDOUS EVENTS

Risk assessment involves the determination of the qualitative or quantitative estimate of the threats/hazards involved in water vending and their potential impact on public health. It is important to assess the entire system including the nature and quality of source water, to the abstraction, treatment if any and storage, handling at the point of sale and the transportation and storage containers. At all these stages, the control measures in place, if any, should also be assessed. The assessment is geared towards identification of contaminant pathways and their mitigation.

A hazard can be defined as any physical, biological, chemical or radiological agents that can cause harm to public health while a hazardous event is an event that introduces hazards to, or fails to remove them from, the water vending system.

The first step in system risk assessment is to identify the hazards and hazardous events that are a threat at all points within the water vending system and their likelihood to occur. This will only be possible if the utility can identify all forms of water vending within their areas of jurisdiction and come up with detailed flow diagrams for each. This exercise should then be followed up by both desk studies and field visits to identify hazards at every point of the flow diagrams. It is also required that utility should think beyond the obvious when it comes to identifying these hazards by assessing any historic information and events as well as trying to predict future situations that may be yet to occur.

The second step after identifying all hazardous events, their associated hazards and the likelihood of occurrence is risk evaluation. Risk in this case is defined as the likelihood that a hazardous event will cause harm measured against its consequential severity. The risk level determines areas where priority action should be focused on by the utilities in order to ensure vended water safety and quality. All the risks identified and evaluated should be documented and be subjected to regular reviews no matter how low their risk level is. This is done so that the risks are not forgotten or overlooked, and it provides the utility with a record of due diligence should incidents occur.

The detailed description on how risk assessment should be carried out is provided in the WASREB Water Safety Planning Guideline 2018 of which these vending guideline are an annex. Tables 1 to 4 below give some of the common hazards associated with various water vending systems.

3.1. Common hazardous events and associated hazards in a water kiosk vending system

Table 1: Hazardous events and associated hazards in a water kiosk vending system

Hazardous events	Associated Hazard
Poor quality/contaminated source water	Lack of proper treatment of water by the utility or ingress of contaminants along the pipelines may lead to vending of this contaminated water at the kiosks.
Borehole head works not water tight	Surface water intrusion into the boreholes – Very old boreholes that are rarely serviced.
Borehole casing corroded/incomplete	Surface water and soil intrusion into the existing boreholes – Old boreholes which are rarely serviced
Storage tank material	Leakage of contaminants into the stored water
Unclean water tanks/containers	Microbiological contamination (biofilm growth in the inner walls of the containers) and suspended solids due to prolonged use without cleaning.
Vendors personal hygiene	Microbiological contamination due to unhygienic handling of the water at the water kiosk
Health of Vendors	Pathogen contamination of the water intended for vending.
Location of water kiosk	Microbiological contamination due to location of the water kiosk in proximity of latrines and dumpsites and generally unclean environment around the water kiosk
Uncovered storage tanks	Ingress of contaminant material such as dust, solids and even animals
Use of dirty hosepipes	Microbiological contamination due to placement of the hosepipe on dirty ground surfaces.
Animals in close vicinity of the kiosk	Microbiological contamination from animal excreta.

3.2. Common hazardous events and associated hazards in a water tanker vending system

Table 2: Hazardous events and associated hazards in a water tanker vending system

Hazardous events	Associated Hazard
Poor quality/contaminated source water	Lack of proper treatment of water by the utility or ingress of contaminants along the pipelines may lead to vending of contaminated water by water tankers which sell utility water.
Abstraction methods	Microbiological contamination – use of dirty hosepipes rolled on dirty surfaces and containers to draw the water and use of pumps which might disturb sediments
Uncovered water tankers	Some water tankers may not have proper lids hence leading to ingress of contaminant material during transportation of water.
Unclean water tanks/containers	Microbiological contamination (biofilm growth in the inner walls of the containers) and suspended solids due to prolonged use without cleaning.
Vendors personal hygiene	Microbiological contamination due to unhygienic handling of the water in the tanker
Health of Vendors	Pathogen contamination of the water intended for vending.
Multiple use of the tanker	Contamination of the water due to use of the tank to supply untreated water from other sources and other liquids. Some vendors have been seen to supply raw water to construction sites and later use that same tanker to supply clean treated water to consumers.
Old and rusted tankers	Contamination of water by the rust

3.3. Common hazardous events and associated hazards in a hand or animal drawn cart water vending system

Table 3: Hazardous events and associated hazards in a hand or animal drawn cart water vending system

Hazardous events	Associated Hazard
Poor quality/contaminated water	Vending of contaminated water – since most of these vendors get their water from any available source whose quality is not guaranteed.
Use of animal	Microbiological contamination from donkey or oxen excreta if the cart is not well designed or the water is handled poorly.
Uncovered water containers	Some of the containers may not have proper lids hence leading to ingress of contaminant material during transportation of water.
Unclean water tanks/containers	Microbiological contamination (biofilm growth in the inner walls of the containers) and suspended solids due to prolonged use without cleaning.
Vendors personal hygiene	Microbiological contamination due to unhygienic handling of the water in the tanker
Health of Vendors and animals	Pathogen contamination of the water intended for vending.
Multiple use of the containers	Contamination due to use of containers to carry untreated water and other liquids.

3.4. Common hazardous events and associated hazards at water points

Table 4: Hazardous events and associated hazards at water points

Hazardous events	Associated Hazard
Meteorology and weather patterns	Flooding; microbiological contamination and increased turbidity for unprotected springs and wells.
	Drought; inadequate water and increasing contaminant concentration.

Agriculture	Microbiological contamination, pesticides, nitrates, ammonia, phosphates, slurry and dung spreading especially for unprotected springs and poorly constructed shallow wells.
Housing- septic tanks, pit latrines and waste disposal	Microbiological contamination, pharmaceutical residues - Affects springs shallow wells found within urban settlements where there are poor sanitation practices.
Vendors personal hygiene	Microbiological contamination due to unhygienic handling of the water at the spring or well.
Health of Vendors	Pathogen contamination of the water intended for vending.
Use of dirty containers and equipment for drawing water	Microbiological contamination – This is especially so for shallow wells where the container used to draw water together with the rope are placed on the ground which is normally not clean.

4. CONTROL MEASURES FOR WATER VENDING SYSTEMS

The identification of all hazards within the vended water system components should lead to the formulation of control measures to guard against the hazards. Control measures are actions that reduce levels of hazards within water supply systems either by preventing entry, reducing concentration, or by restricting their production. Many control/regulatory measures are effective against more than one specific hazard while some hazards may require more than one control measure for effective control. The assessment and planning of control measures should ensure that health-based targets will be met and should be based on hazard identification and assessment.

Identification and implementation of control measures needs to be based on a multi-barrier principle so that if one barrier fails, the remaining barriers will still operate, thus minimizing the likelihood of contaminants passing through the entire system and reaching a threshold to cause harm to consumers.

Certain control measures are actions at specific points in the system and are referred to as control points. Defining control points is an important component of the water safety plan and provides water utilities with information regarding where specific actions need to be taken to ensure water safety. The prioritization of control measures and points must be related to the severity of the potential risk. Control points identified as being of higher priority are therefore monitored more frequently to ensure compliance.

In water vending regulation, the control points include the water source, transportation/transmission and the consumer point. Any control measures already in place should be identified and validated. Existing gaps in controls should then be filled by improving on the existing controls or by coming up with new controls. Some of the typical control measures for the different vending systems are presented below.

4.1. Control measures for water kiosk vending system

Table 5: Typical control measures for water kiosk vending systems

Hazardous events	Control measures
Poor quality/contaminated source water	The kiosk should only get water from sources that are approved and trustworthy. In case of any incidences with the source such as pipe bursts or ingress of surface water into the boreholes, the kiosk owner should report to the authorities and stop selling of the water until the incident is taken care of.
Borehole head works not water tight	All borehole head works should be constructed in such a way that they are water tight and cannot allow ingress of surface run off or sewerage. There should be enough clearance off the ground to ensure this.

Hazardous events	Control measures
Borehole casing corroded/incomplete	During construction of boreholes, care should be taken so that casings are inserted on the entire length of the borehole, this will prevent unwanted materials from getting into the borehole water. The Borehole should also be inspected periodically, and any corroded casings replaced.
Storage tank material	The materials for the storage tanks should only be those materials approved for water handling. Any material that will lead to leakage of contaminants into the water should not be used.
Contaminated water tanks/containers	Water tanks and containers should be properly cleaned and disinfected periodically every three months and after any incidence of contamination.
Vendors personal hygiene	It is very important that vendors practice good personal hygiene so as not to contaminate the water they are vending.
Health of Vendors	Vendors handling the water should be regularly checked for any communicable diseases by the public health unit to ensure no pathogen contamination takes place.
Location of water kiosk	The water kiosk should be located in a clean place away from pit latrines, animal shed, dumping sites and any other thing that might easily cause contamination of the water.
Uncovered storage tanks	All storage tanks should be well covered to prevent any unwanted materials and animals getting into the tank and causing contamination.
Use of dirty hosepipes	Hosepipes used at the water kiosks should be kept in a very clean state. The pipes should be connected in such a way that at no point are they touching the ground and should only be handled by the kiosk vender. When filling the container, the pipe should not be allowed to be in contact with the water in the container. The pipes should be properly cleaned periodically and disinfected.
Animals in close vicinity of the kiosk	No animals should be allowed to graze or come near the water kiosks as this could cause contamination of the area around the kiosk and eventually the water being vended.

4.2. Control measures for water tanker vending systems

Table 6: Typical control measures for water tanker vending systems

Hazardous events	Control measures
Poor quality/contaminated source water	Water tankers should only get their water from approved sources preferably through a hydrant provided, controlled and designated as a source by the utility.
Abstraction methods	The abstraction methods chosen by water vendors should not lead to contamination of the water. Pumps and hosepipes used should be kept clean and away from the ground. The water pump and hosepipes should be mounted on the vehicle so that it does not have to be placed on the ground during abstraction.
Uncovered water tankers	All tankers should have proper fitting covers which should always be kept closed.
Contaminated water tanks/containers	Water tankers should be thoroughly cleaned, disinfected and inspected regularly.
Vendors personal hygiene	It is very important that vendors practice good personal hygiene so as not to contaminate the water they are vending.

Health of Vendors	Vendors handling the water should be regularly checked for any communicable diseases by the public health unit to ensure no pathogen contamination takes place.
Multiple use of the tanker	Water tankers should never be allowed to be used for anything other than supply of drinking water. Any vendor found doing this should have his license cancel
Old and rusted tankers	All old and rusted tankers should be decommissioned and banned from supplying drinking water.

4.3. Control measures for hand and donkey drawn water vending systems

Table 7: Typical control measures for hand and donkey water vending systems

Hazardous events	Control measures
Poor quality/contaminated source water	Vendors should only get water from approved sources.
Use of animal	Donkeys should not be let near the water sources. The cart should be parked some distance away, the containers unloaded and filled at the source and carried to the cart. Secondly the carts should be designed in such a way that there is enough distance between the donkey and the cart and some measure of control so that the animal excreta does not contaminate water on the cart.
Uncovered water containers	All containers used for ferrying water should have properly fitting lids.
Contaminated water tanks/containers	All containers should be cleaned regularly and kept in a clean condition.
Vendors personal hygiene	It is very important that vendors practice good personal hygiene so as not to contaminate the water they are vending.
Health of Vendors and animals.	Vendors handling the water should be regularly checked for any communicable diseases by the public health unit to ensure no pathogen contamination takes place.
Multiple use of the containers	Just like water tankers, the containers used in water vending carts should only be used for the purpose of drinking water supply.

4.4. Control measures for water point vending systems

Table 8: Typical control measures for water point vending systems

Hazardous events	Control measures
Meteorology and weather patterns	Shallow wells should be constructed in such a way that the head works have a proper ground clearance and with a lid to prevent ingress of surface run off. Springs should be well protected by planting enough vegetation cover within the spring shed to ensure surface run off is well filtered.
Agriculture	Agricultural practices within the spring shed should be banned so as to prevent water contamination from fertilizers and other agricultural chemicals.
Housing- septic tanks, pit latrines and waste disposal	Pit latrines and septic tanks should be located at least 30 metres from the spring and shallow wells and if possible, always on the downstream side. No dumpsites should be allowed in the vicinity of the spring or well.

Hazardous events	Control measures
Vendors personal hygiene	It is very important that vendors practice good personal hygiene so as not to contaminate the water they are vending.
Health of Vendors	Vendors handling the water should be regularly checked for any communicable diseases by the public health unit to ensure no pathogen contamination takes place.
Use of dirty containers and equipment for drawing water	The containers used in drawing water from the water points should be kept clean. For shallow wells, the mode of extraction should be a winch contraption. This ensures that the rope used for lifting the container is not touched or placed on the ground which may result in contamination of the water. The container can also be suspended on the winch hence will not be placed on the ground when not in use.
Stagnant water around the water point	The area around the water point should be kept well drained so that no water stagnates around it forming mud that can contaminate the clean water.

PART II: REGULATION OF WATER VENDORS

5. TYPICAL RULES AND REGULATIONS ON WATER VENDING

The complexity of vended water calls for a multi-sectorial approach in as far as regulation and water safety is concerned. A participatory approach by all concerned stakeholders is needed to enforce the rules and regulations regarding water vending. Some of the stakeholders to be involved in water vending include WASREB, water utilities, Water Resources Authority (WRA), County public health departments and consumers. All these stakeholders need to work together for effective implementation of their roles.

The Water Act 2016 gives water utilities the responsibility of providing safe water to consumers while WASREB regulates the interests and rights of consumers. This puts WASREB in the lead role in the regulation of vended water and ensuring its safety. Water utilities are at the grass root level of WASREB's level of authority hence they are better placed to regulate and monitor water vendors. In carrying out this regulatory function, the utilities should work closely with all water vendors as opposed to viewing them as competitors since the vendors exist because of their failure to adequately provide water within their region of operation. In any case, the public will always blame the utilities on issues to do with poor drinking water quality, such as waterborne diseases within their areas of jurisdiction regardless of the water sources.

The Public Health Act 2012 gives the Central Health Board the role of protection of drinking water supplies. With the devolution of the health function to the county, this role is devolved to the county public health unit. The unit is tasked with licensing of vendors and regulation of vendors' hygiene practices in provision of clean and safe drinking water. In most counties, the public health unit has only touched on water tanker vendors when it comes to regulation of water vending by issuing operating licenses. It is imperative that the public health unit should extend their regulation role to all water vendors to ensure water safety for all.

The functions of the water utilities and the County Public Health Unit in the regulation of water vending should be harmonized so that they work together for efficiency. Due to the unique nature of conditions surrounding the vending of water in different areas, the two bodies should work together to come up with rules and regulations for governing water vending that are specific to their areas. The rules and regulations should act as the terms of reference for both the vendors and regulators. Highlighted below are some of the typical rules and regulations for water vending.

5.1. Approval of water sources

The main issue that makes water vending regulation difficult is the fact that water vendors get their water from any available source hence increasing health risks to consumers. The water utilities need to prepare an inventory of all water sources available to the water vendors. These sources should then be vetted to ascertain if their water meets the drinking water quality standards. Those that meet the standards should then be approved as sources for water vendors with measures being put in place to ensure that the integrity of the source can be maintained. The sources whose water does not meet the standard should either be banned from use by water vendors or if possible and necessary rehabilitated/improved through sterilization and other methods of treatment.

The approved sources should be made public and consumers sensitized against accepting water from any other unapproved sources and to report the same to the authorities. Any vendor found distributing water from unapproved sources should have his license revoked and should be heavily fined for endangering the health of consumers. If it is established that the water distributed by the vendor caused harm to consumers legal proceedings against the vendor shall be instituted.

5.2. Licensing

All vendors should be licensed by both the water utility and the public health unit before they start vending water. Any person wishing to carry out water vending should first make an application to the water utility clearly stating the type of water vending, the water sources and area of operation. The person will also then

apply to the public health unit for a permit. The latter will carry out an inspection of the premises and equipment to ensure all hygiene requirements are in place. The license should only be given once the vendor has put in place all the requisite provisions needed to ensure water safety to the satisfaction of both the water utility and the public health unit. The license should be renewed annually subject to an inspection of the vendor's water sources, premises, transport, storage containers, equipment and water handling practices.

5.3. Vendor associations

There is a need to form vendor associations for easier regulation of vendors. The associations should be registered with the water utility and the management made responsible for the activities of its members. All vendors should be required to be members of these associations and to abide by any rules that the association will put in place. The associations should keep an up to date register of all its members and their areas of operation for ease of tracking. The associations' objectives include: educating its members on water safety, capacity building of members on water quality awareness and business skills, identification of representatives to monitor that the rules and regulations put in place by the utilities are adhered to by all its members. Actions of individual members contravening any rules and regulations will have repercussions for the entire association; hence will act as a deterrent to vendors breaking rules as their colleagues are watching.

5.4. Random checks, sampling and testing

The water utilities and the public health unit should carry out random checks on vendor premises and equipment and take water samples for testing. This will help keep the vendors always alert and always keen to adhere to the rules and regulations. The random sampling should however be structured in such a way that a majority if not all vendors are at least checked within a given time period, say quarterly.

5.5. Personnel health and hygiene

All vendors should be required to have passed health checks before being allowed to handle water. This is to prevent the spread of communicable and other diseases such as tuberculosis and typhoid from being spread through water vending. The public health unit should carry out tests on the vendors and those found to be carriers treated before being given certificates of good health that should be renewed after a specified time period.

The vendor should also be trained on good personal hygiene practices. Clothing such as overalls or coats should be recommended for all water vendors. The clothing should be in a bright colour so that the vendors are not only easily recognizable but visible when unclean. This should follow the practice in the food industry that requires food handlers to wear protective clothing to prevent contamination of the food.

5.6. Tank and container colour

The colour of tanks and containers used in distribution of vended water should be bright enough (e.g. lighter shades of blue for tankers and white for containers) so that just from a visual inspection, the cleanliness of the container can be ascertained. Black and dull coloured containers make it very hard to spot the accumulated dirt that could contaminate the water and hence vendors can get away with not cleaning the containers for a very long period of time.

5.7. Vended Water Tariffs

One of the functions of WASREB as given in the Water Act 2016 is evaluation and approval of water tariffs applied by water service providers in line with consumer protection standards. There are currently only tariffs for utility water vended at water kiosks; hence consumers in some areas have been left at the mercy of some unscrupulous vendors who charge exorbitant prices for their water. It is thus recommended that water utilities should come up with reasonable standard tariffs for all vended water which will ensure that both the vendor and the consumer are well taken care of. This should be derived from market and socioeconomic surveys in the respective areas in consultation with both the consumers and the different types of vendors

as key stakeholders. The tariffs should then be forwarded to WASREB for approval and publication in the Kenya gazette before adoption.

5.8. Reporting

The water utilities should come up with reports on the performance of water vending within their areas of jurisdiction. These reports should contain information detailing the number and types of water vendors, monitoring and surveillance activities and the results of water quality sampling from the vendors. The reports should be part and parcel of the utility quarterly reports submitted to WASREB who will be the oversight authority. The reports should also contain any issues that may require the attention of WASREB.

In case of any incidences involving water vending such as water borne disease outbreaks or contamination, the utilities should be the first to respond, investigate and carry out emergency measures to stop the escalation of the incident. Incident reports should then be generated with recommendations and forwarded to WASREB immediately for further action.

6. SPECIFIC RULES AND REGULATIONS WATER VENDORS

Over and above the typical rules and regulations given in the preceding chapter, this document proposes specific rules and regulations for the various water vendors that should be followed by the vendors and used in their regulation by the water service providers. These rules and regulations are as given below.

6.1. Water Kiosks

6.1.1. Water Kiosk ownership

- (i) The kiosks will be owned by either the WSPs, private individuals (including land lords) or community organizations.
- (ii) The owners of the water kiosks will be required to have an approval or consent or Memorandum of Understanding from the owner of the land on which the kiosk is built in cases where the land does not belong to the kiosk owner.

6.1.2. Water Kiosk Structures

- (i) The kiosk will typically be a concrete/steel structure capable of supporting an overhead tank of a given capacity with a lockable and secure door. Where water supply is consistent and with good pressure, then a storage tank may not be necessary.
- (ii) The floor of the water kiosk and the area around the kiosk should be free draining so that no water can stagnate.
- (iii) The kiosk and its surroundings must always be kept in a clean and tidy state

6.1.3. Water Kiosk Operators

- (i) The water Kiosk shall be operated by either private individuals (including land lords) or community organizations licensed by the WSPs to operate the kiosks. The private individuals must not be employees of the water utilities and will run the water kiosks as their own businesses and will be required to have business licenses from the local authority.
- (ii) A kiosk operator must be literate (can read and write) and numerate (can understand and use numbers) i.e. a person who has at least received primary school education.
- (iii) The kiosk operator must be a healthy individual with no communicable diseases and must have a certificate of health from the Public health department which will be renewed every 6 months or on a need basis especially following an outbreak.
- (iv) Utilities will be required to advertise and invite operators to apply for the day to day running of their kiosks.
- (v) Kiosk operators will be required to sign a one (1) year contract with the water utility stipulating in detail the rights, responsibilities and obligations of both parties to each other and to the customers and other stakeholder. The contract will be reviewed at the end of the year and either terminated or renewed

depending on the contract performance by the parties. An example of such a contract is herein provided in Annex 1.

- (vi) A kiosk operator will be required to pay a refundable security deposit of Kshs. 10,000.00 to the water company before signing the contract. This money will either be refunded at the end of the contract or be used to repair damages occasioned by the operator's negligence or to settle any outstanding debts.
- (vii) Once the operator has paid the security deposit and signed the contract, the WSPs will be required to build the capacity of the operator through training. The training curriculum will mainly cover water safety through good water handling practices, rules and regulations for water kiosks, how to relate to water customers, water tariffs and regulations, record keeping and reporting and the general day to day operations of the water kiosk.

6.1.4. Water Kiosk Business Hours

- (i) The operating hours of the kiosks will be as determined by the WSPs and will be dependent on the number of clients, the amount of water they require and their water fetching habits.
- (ii) The number of hours and days that the water kiosk should be operational should be clearly stated in the contract and clearly displayed at the premises.

6.1.5. Water kiosk Metering and Billing

- (i) Every water kiosk will have a water meter to monitor water consumption and this will form the basis of billing the kiosk operator.
- (ii) The meter will be read at least once a month by personnel from the WSPs for billing purposes and a water bill will be generated based on the prevailing tariffs rates and the amount of water used within that month.
- (iii) A water bill will be sent to the kiosk operator together with details for the WSPs' preferred method of payment and deadlines for payments.

6.1.6. Water Retail prices/Tariffs

- (i) The price at which customers will buy water from the water kiosk will be as set in the tariff set by the WSPs and approved by the Water Services Regulatory Board.
- (ii) The price will be set in such a way that the water users find it affordable while at the same time it guarantees a good profit for the Kiosk operator after settling his bills.
- (iii) The water prices must be displayed at the premises where they can easily be seen by the customers.

6.1.7. Record keeping and reporting

- (i) The kiosk operator will be required to keep a record of his operations at the kiosk. Some of the things to be recorded will include the opening and closing meter reading, daily cash collections, bill payment dates and receipts, water outages or poor quality of water and any other incidences that may occur.
- (ii) All record will be recorded in a simple exercise books and/or on any forms that may be provide by the WSPs.
- (iii) The operator will be required to report to the WSPs any pipeline leakages or damages, water outages, poor quality water received, vandalism incidences and any other issues as will be stipulated by the WSPs.

6.1.8. Kiosk operator management and monitoring by the WSPs

- (i) The WSPs will be tasked with managing and monitoring the kiosk operators through their staff under the commercial manager.
- (ii) The management tools to be used will include but not limited to a checklist based on the rules and regulations, the contract signed between the operator and WSP, the rules and guideline for water kiosks and any other forms that may be provided by the WSP.

- (iii) The WSPs will randomly visit the kiosk at least once a month for monitoring purposes to check whether the rules and regulations are adhered to and to collect data from the Kiosk operators record books which will include meter readings, consumption figures and the kiosks profitability.
- (iv) The data collected from the management and monitoring exercises will form the basis for the contract renewal evaluation at the end of each contract period.

6.1.9. Dispute resolution

- (i) Any disputes arising between the kiosk operator and the WSP that cannot be solved internally as per the contract should be referred to WASREB for arbitration.

6.1.10. Contract renewal/termination

- (i) At the end of every contract period, the WSP will carry out an evaluation of the contract performance to determine whether the contract is eligible for renewal. Any operator who does not meet a given threshold in as far as contract performance is concerned will have his contract terminated.
- (ii) The contract can also be terminated at any time if both parties are in agreement to terminate and due procedure will be followed as laid out in the contract.
- (iii) The WSPs can also terminate the contract at any time provide that there is gross misconduct by the operator that necessitates a breach of contract.

6.2. Water Tankers

Water tankers are mainly licensed by the county public health department to supply drinking water. However, since they operate under the areas of jurisdiction of the WSPs, it is important that the water utilities play a bigger role in managing and regulating the water tankers. This can only be achieved if the utilities partner with the County Public Health department to jointly undertake the management and monitoring of water tankers as per the set of rules and regulations given below.

6.2.1. Ownership

- (i) Water tankers will be owned either by the WSPs, private individuals or community organizations.

6.2.2. Water Tanker specifications

- (i) The water tanker will typically be a vehicle (lorry) that has a water tank mounted on it.
- (ii) The vehicle should be road worthy and should have complied with all the requirements of the Traffic Act.
- (iii) The water tankers will have a uniform sky blue colour with the words CLEAN WATER written in white on the sides of the water tank in a font size that is legible. The identity of the tanker and telephone contact should also be clearly labelled on the body of the tank.

6.2.3. Water tanker Operators

- (i) The water tanker operators will be individuals who are not employees of the WSPs unless they are operating a tanker belonging to the water utility.
- (ii) The operators must be literate and numerate and must have at least received primary education.
- (iii) The operators must have undergone some training from the WSPs on proper water handling practices for water tankers and certified.
- (iv) The driver of the water tanker must be an individual with a license for driving that class of motor vehicles.
- (v) The operators will be required to be members of a water vendors' association and will have to carry a tag with their passport photo, names, vendor association name and number.

6.2.4. Licensing

- (i) Water tankers will be required to obtain an operating license from the County Public Health department after having undergone an inspection to ascertain if they meet the requirements of distributing clean drinking water.
- (ii) The tankers will also have to apply for a business license from the county government as they are deemed to be businesses.
- (iii) The water tanker operators will have to go through a health check, and treatment if necessary, at the county health department to ascertain if they have any communicable diseases such as Typhoid and Tuberculosis that can be spread through water handling. They will they be given certificates which will require renewal every 6 months.

6.2.5. Management and monitoring system by the WSP and County Public Health Department

- (i) The water tankers will be required to only get water from approved sources, preferably a hydrant provided and controlled by the WSPs.
- (ii) The WSP will take details of the tanker and its operator, time of fetching the water and where the water is to be supplied and a sample will be taken from the tanker for testing to ascertain the safety of the water in the tanker.
- (iii) The WSP in partnership with the County Public Health Department will conduct random checks on tankers operating within the county to ascertain their compliance to the set rules and any water tanker found flouting the rules will have their license cancelled.
- (iv) The water tanker will be required to be cleaned and disinfected by the WSP before it starts operations and every three months thereafter at the operator's cost.

6.2.6. Water retail price/tariffs

- (i) The price at which customers will buy water from the water tankers will be as set in the tariff set by the WSPs and approved by the Water Services Regulatory Board.
- (ii) The price will be set in such a way that the water users find it affordable while at the same time it guarantees a good profit for the water tanker operator after settling his bills.
- (iii) The WSP will have to sensitize the public on the set prices so as to avoid exploitation.

6.3. Hand and animal-drawn cart vendors

These are by far the hardest vendors to regulate as they vend small quantities of water and are numerous in number. They also have no fixed operating premises and sometimes vend water from any available source regardless of the quality and safety. It will require greater cooperation between the WSPs and the County Public Health Department to monitor and regulate these water vendors. They will also require very strong vendor associations to enforce some of the rules and regulations.

6.3.1. Vendor associations

- (i) All hand and animal drawn carts vendors will be required to join a vendor association within their locality and if one is not available then they can come together, form an association and register it with the WSPs.
- (ii) The vendor association will among other things fight for and protect the rights of their members, regulate the operations of their members and ensure they follow all laid down rules and regulations, carry out trainings on safe water handling practices in conjunction with the WSPs and the County Public Health Departments and any other functions that will be ascribed to it.
- (iii) Members of the associations will also be their "brother's keeper" since actions of one member may result to consequences for the entire association which may include license cancellation.

- (iv) Vendor associations will be required to maintain a register of all its members and their areas of operation and issue the members with identity cards and numbers for easier management.
- (v) Members or a given vendor association will be required to put on brightly coloured overalls, preferably white, with the association name printed at the back for easier identification. The bright coloured overalls will also indicate the levels of personal hygiene of the vendor.
- (vi) The WSPs will work with the vendor associations to identify and approve water sources that are safe and of good quality. All association members will be required to draw water only from the points.
- (vii) It will be the responsibility of the vendor associations to discipline any errant members and this may be done through warnings, fines, suspensions or expulsions depending on the severity of the contravention.

6.3.2. Carts

- (i) The water carts will be fabricated from either metal or wood or any other suitable material that will not release substances that may contaminate the water being carried on them.
- (ii) Animal drawn carts should be fabricated in such a way that there is enough space between the animal and the cart with a mechanism for ensuring that the animal excreta cannot find its way to the cart and contaminate the water being transported.
- (iii) The cart should also be fabricated in such a way that it is not only easy to pull but is also comfortable and prevents injuries to the person or animal drawing it.

6.3.3. Water prices and tariffs

- (i) The retailing price will be set by the WSPs in consultation with the vendors through their associations and will be approved by the Water Services Regulatory Board.
- (ii) The prices will consider factors such as distance from the sources and price of the water at the source.

6.3.4. Water containers

- (i) The water containers used in transporting the water must be of bright colours, clear or translucent, so that their cleanliness can easily be adjudged at a glance.
- (ii) These containers will also be cleaned and disinfected by the associations with the help of the WSPs at the owners cost every three months.
- (iii) Old and leaking containers without lids should not be used in vending the water.

REFERENCES

WASREB Water Safety Planning Guideline 2018

WHO Water Safety Plan Manual – Step-by-step risk management for drinking-water suppliers

WHO Vended Water Guideline 2008

WSTF UPC Toolkit for Urban Water Supply 2007

ANNEXES

Annex 1: Contract between WSPs and Water Kiosk Operators

WATER KIOSK MANAGEMENT CONTRACT

Between

The Water and Sewerage Company Limited

And

The Water Kiosk Operator

—

Definitions

The Water and Sewerage Company Limited

TheWater and Sewerage Company Limited was established under the Companies Act as a private Company. The Company has to provide safe water on a commercial basis and is responsible for water supply in the urban areas of (hereinafter referred to as “the Company” or “the utility”).

The Water Kiosk Operator

The Water Kiosk Operator (hereinafter referred to as “the Operator” or “the Water Kiosk Operator”) is responsible for the management of the water kiosk. The Operator sells water to his or her clients for a price, which has been approved by the Water Services Regulatory Board (WASREB). The Operator is charged by the Company according to the meter readings. The Operator is not an employee of the Company, but acts as an agent of the Company. The Operator is monitored by the Company and has to observe the Rules and Guidelines for Water Kiosk Operators.

The Water Kiosk Operator can be an individual or a registered group. If the water Kiosk Operator is a registered group, the group is signatory to this contract.

The Water Services Regulatory Board (WASREB)

The Water Act 2016 states that the Water Services Regulatory Board (hereinafter called “WASREB”) is, among others, responsible for tariff regulation. The Company can propose a tariff, which has to be approved by WASREB. WASREB has the obligation to:

- Give general direction to the Company,
- Protect the Clients of the Company from being overcharged,
- Analyse the cost efficiency of services provided by the Company,
- Determine standards for the provision of water services to Customers,
- Establish procedures for handling complaints made by consumers against the Company,
- Regulate the service level and the supply to all residents.

The Clients

Individuals fetching and buying water at the kiosk from the Operator (hereinafter referred to as the Clients or Customers).

The Kiosk

The water point where the Operator is selling water on behalf of the Company (hereinafter referred to as “the Kiosk”).

The Assets

The distribution pipe-network, elevated tanks, water points, valve chambers, valves, meter chambers, meters and demised land for kiosks and other infrastructures such as drains and

soakaways (hereinafter referred to as the Assets). Unless stated otherwise, the Assets are owned by the **Water Services Board**.

Water Kiosk Management Contract

Between theWater and Sewerage Company, represented by:

Mr/Mrs/Ms:	
Position:	
Address (Head Office):	Postal Address:
	City/Town:
And the Water Kiosk Operator, represented by:	
Mr/Mrs/Ms (*):	
Address:	Postal Address:
	Plot number:
	City/Town:
National ID Card Number:	
Telephone Number:	
Registered group (*):	
Address:	Postal Address:
	Plot number:
	City/Town:
Registration number:	
Telephone number:	

*) Hereinafter referred to as “the Operator” or “the Water Kiosk Operator”.

The following has been agreed upon and accepted:

Article 1: Rights, responsibilities and obligations

This contract specifies the rights, responsibilities and obligations of the utility and those of the Water Kiosk Operator.

Article 2: Status of the Water Kiosk Operator

The Water Kiosk Operator is not an employee of the Company. The Operator, therefore, is not entitled to any social or other benefits, which are available to the employees of the Company. In principle, the Operator is treated like any other Customer of the Company. To a certain extent, the Water Kiosk Operator runs his or her kiosk as if it is his or her own business. The Operator vouches that he or she has not signed any other work contract or agreement with any other third party, which may prevent him or her from fully performing his or her duties as a Water Kiosk Operator.

Article 3: Number and location of the kiosk

The Water Kiosk Operator is responsible for the management of kiosk no.;, which is situated in:

Name of town:

Name of town section or area:

Article 5: Duration of the Contract

The present Contract is valid for the duration of one (1) year. If both parties have not expressed any grievances or objections and have not given notice of intention to terminate, the contract will be renewed by tacit agreement on a yearly basis.

Article 6: Responsibilities and obligations of the utility:

The utility:

- Shall provide safe, potable water into the distribution system 365 days a year at levels sufficient to meet the requirements of all Clients.
- Shall supply water to the Operator and the Clients at an affordable tariff. The water tariff will be determined by the Company and has to be approved by WASREB. The tariff should allow the Company to achieve its social objective (enable all residents to purchase sufficient quantities of potable water) and its financial objective (the financial sustainability of the water supply system).
- Shall carry out, without delay, any necessary maintenance and repair work on the kiosk (door, locks, roof, taps, valves, the meter, window shutter, etc.), the meter chamber (if existing), the valves, the drains, soakaways and the pipes linking the kiosk to the main distribution pipe-network. The Company is committed to keeping the Kiosk (only if owned by the Company) and the other Assets in good technical condition and to replace damaged items or parts as quickly as possible.
- Shall inform the Operator in advance about any essential maintenance or construction works that may affect water quality, water supply or the functioning and management of the Kiosk.

- Shall check the reliability of the water meter at regular intervals and replace in case the Water Kiosk Operator or the Company have strong reasons for doubting the reliability of the meter.
- Shall provide the Water Kiosk Operator with the necessary training. Training has to comprise the legal, technical, hygienic, organisational and financial aspects of kiosk management.
- Shall assure the necessary support for the Water Kiosk Operator when it comes to billing and the collection of revenues and informing the Clients about new tariffs and other measures taken by the Company.

In case the utility can be held responsible for neglect and in case this neglect has hindered the proper functioning of the Kiosk, the Operator has the right to claim compensation for foregone incomes.

Article 7: Responsibilities and obligations of the Water Kiosk Operator

The Water Kiosk Operator will:

- Keep the kiosk and its surroundings clean.
- Clean the kiosk and its surroundings himself/herself.
- Make sure that drains are kept clean and open.
- Remove all water or mud pools in the direct surroundings of the kiosk.
- Sell water to all persons or institutions who are willing and able to pay for their consumption and who respect the norms and rules of proper conduct.
- Respect the opening hours of the kiosk that have been agreed upon.
- Sell water only at the tariff, which has been approved by WASREB.
- Pay his or her water bill on time.
- Pay all penalties that may arise from overdue payment or other irregularities.
- Manage the kiosk himself/herself. The management of the kiosk can only be entrusted to a third party if the Company has given its consent.
- Keep the Kiosk and the other Assets in good operational condition.
- Report, as soon as possible, to the Company any damage, loss of water quality or interruptions in supply.
- Inform the Company if he or she has or had to waste significant quantities of water due to poor water quality.
- Try to prevent all acts of vandalism or acts resulting in the pollution of the kiosk, its drains and soakaways.
- Report acts or attempts of vandalism to the Company.
- Deliver a service to his or her clients, which will contribute to the good image of the Company. The Operator should refrain from unilateral actions or speech which might bring the Company in disrepute.
- Treat his or her clients with respect and assist them, and especially the elderly and the handicapped, in anyway he or she can.
- Inform his or her clientele about any measures that have been taken by the Company with regard to tariffs or the management of the kiosk.
- Try to prevent conflicts between and unrest among Clients.
- Inform Clients and others about the need to keep the kiosk clean and to prevent vandalism.

- (If necessary) align clients or their recipients in order to assure that all Clients get served on time.
- Inform the Company as soon as possible if he or she is unable, for example as a result of illness, to fulfil his or her responsibilities and obligations.
- Respect the Rules and Guidelines for Water Kiosk Operators as specified in the annex to the present Contract.

In case the Operator can be held responsible for any acts of theft, vandalism or neglect the Company has the right to charge the Operator for all the necessary repair works.

**Article 8: Prolonged absence
(Only applicable in case the Operator is an individual)**

In case of a prolonged absence due to circumstances such as illness, the death of a close family member or pregnancy, the Operator may delegate his or her responsibilities and obligations to another person, but only if the Company has agreed upon the delegation of duties and has accepted the person proposed by the Operator. The Water Kiosk Operator, having signed the present Contract, retains overall responsibility for the management of the Kiosk.

In case of prolonged illness, the Operator has to provide the Company with a doctor's statement.

**Article 9 Appointing Water Vendors
(Only applicable in case the Operator is a registered group)**

The Operator has appointed one or more Water Vendors. Only appointed Water Vendors are allowed to sell water at the kiosk. All Water Vendors have to be known and accepted by the Company. Water vendors should have received training from the Company.

Article 10: In case of dispute

All disputes or differences should be settled amicably between the contracting parties. If necessary, a dispute or difference between the signatories of the present Contract shall be settled, in accordance with WASREB procedures, by an arbitrator to be appointed by the two (2) parties.

Article 11: Termination of the Contract

Both signatories can terminate the present Contract at any time upon written notice of not less than 30 days. If the Operator wishes to terminate the present Contract, he or she has to inform the employee of the Company in charge of the monitoring of the kiosk system. The Operator can only terminate the Contract after having paid his or her last water bill and after having cleared all outstanding debts with the Company.

The Company can terminate the present Contract if:

- The Operator does not respect any or all the responsibilities and duties specified in this contract and in the “Rules and Guidelines for Water Kiosk Operators” annexed to the present Contract,
- The Operator displays immoral or inconsiderate behaviour vis-à-vis his or her Clients, other residents, the local Authorities or the Company.

Article 12: Force Majeure

In the event of Force Majeure – unforeseeable events beyond the control of the parties to the contract, which prevent either party from meeting its contractual obligations – the contractual obligations, as far as affected by such event shall be suspended for as long as the impossibility of performance due to this situation continues provided that the other party is notified within one (1) week after the occurrence of the Force Majeure.

Article 13: Governing Law

The present Contract shall be governed by the laws of the Republic of Kenya.

Article 14: Entry into Force and Commencement of Services

The Contract enters into force upon the signing by both parties. The Operator shall commence his or her services within 15 days after the entry into force of the contract.

Done in (3) three originals at:

This day of20....

For the Water and Sewerage Company:

NameSignature

The Water Kiosk Operator:

NameSignature

Water Services Regulatory Board

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