german cooperation
DEUTSCHE ZUSAMMENARBEIT

Published by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Standard Operating Procedures

for District and Township Water Supply and Sanitation Authorities in Tanzania

Foreword

Have you ever wondered why people do things the way they do them? Have you ever asked yourself what it would take to have people do things the way you want them to do them? Giving clear instructions may help but giving clear written instructions will help much better. Writing the instructions well before the activity is to be done is actually the best approach. When the activity is of a repetitive nature and a priority undertaking of an organization, writing its standard implementation instructions or procedure leads to what is termed as the standard operating procedure.

A Standard Operating Procedure (SOP) is a set of instructions that is equivalent to an official directive, covering features of day to day operations that lead to a definite or standardized procedure without losing the effectiveness of the operation.

SOPs are quite effective catalysts that improve performance and organizational results as most quality systems are derived from their standard operating procedures.

It was observed during the sessions in the Capacity Development Programme that the same operational processes implemented across different utilities were producing results of varying quality. Henceforth, the need for standardized instructions or procedures (SOPs) became apparent.

It is with great pleasure that we recognize the wonderful job the district utilities, with the technical support of GIZ and facilitation of the ATAWAS training team, have accomplished in jointly developing these standard operating procedures.
With SOPs, water utilities in the country stand to improve their performance immensely: comply with EWURA, Ministry of Local Government and Regional Administration and Ministry of Water requirements as well as meeting industry's best practice.

These SOPs will be tested in more than 100 water utilities for a maximum duration of three years. Based on the experience gained, the SOPs will then be reviewed in details leading to the second edition of this SOPs document sometime in 2016. Even the best written and dully approved SOPs will fail if they are not followed. Since these SOPs are well prepared and written the only way forward is for all utilities to follow them fully, in order to succeed in achieving full compliance with technical and quality requirements.

We urge all Boards to customize these SOPs, approve, and publish them accordingly.

Andreas Kanzler
GIZ Water Programme Manager Tanzania

Eng. Joshua Mgeyekwa
ATAWAS Chairman

Abbreviations

ATAWAS	Association of Tanzanian Water Suppliers
CD	Capacity Development
CEO	Chief Executive Officer
CM	Commercial Manager
CRO	Customer Relations Officer
DAWASCO	Dar es Salaam Water and Sewerage Corporation
DWSSAs	District and Township Water Supply and Sanitation Authorities
EWURA	Energy and Water Utilities Regulatory Authority
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GRN	Goods Received Note
HRO	Human Resources Officer
ID	Identification (Photo)
NAWAPO	National Water Policy
PI	Performance Indicators
PRO	Public Relations Officer
RRV	Reference Receipt Voucher
SDS	Service Delivery Surveys
SOP	Standard Operating Procedure
TZS	Tanzanian Shillings
TM	Technical Manager
UM	Utility Manager
WSSA	Water Supply and Sanitation Authority

List of References

- The United Republic of Tanzania, Ministry of Water and Livestock Development: National Water Policy 2002.
- The United Republic of Tanzania: The Water Supply and Sanitation Act, 2009.
- Ministry of Water: Memorandum of Understanding between Ministry of Water and Urban Water Supply and Sanitation Authorities, May 2012.
- Ministry of Water: Water Supply and Sanitation Authorities Operational Guidelines, 2012.
- Ministry of Water: Tanzania Standards for Drinking Water, 2010.

Table of Contents

2

Introduction

A Standard Operating Procedure (SOP) is a set of instructions that document steps needed to be taken to implement a certain recurrent activity in an organization. SOPs ensure that an activity is undertaken in a consistent manner that results into the desired output and desired quality.

This SOPs document presents 29 SOPs which are a priority to the district level water utilities as identified by the utilities managers themselves. The SOPs fall into three broad categories of Technical, Commercial and General SOPs.

The SOPs are intended to show case a step by step process to conduct a given activity. In some of these steps certain forms are required to be filled by the utility staff and/or the water customers to firm up the process and provide necessary evidence. These forms have been designed and attached in this SOPs document.

Every SOP shows who within the utility is responsible for its application and within the SOP every step is dedicated to a particular staff member, so that it is clear to both, the utility management and the staff themselves, who is required and responsible to implement the respective step.

When all steps of the SOP have been implemented, it is necessary for the success or failure of the process to be gauged. This gauging is achieved through monitoring of certain indicators called performance indicators. These performance indicators are, therefore, the important measures which will monitor the successful implementation of the SOPs.

Even the best written and dully approved SOPs will fail if they are not followed. The use of SOPs, therefore, needs to be reviewed and re-enforced by management and in particular by the direct supervisors. Copies of the SOPs also need to be readily accessible for reference in the work areas of those individuals actually performing the activity. The copy can either be a hard copy or electronic format and in a book, computer and/or displayed depending on the nature of the activity. Not every SOP is applicable step by step by every utility. Responsibilities of the SOPs also vary from one staff to another depending on the organization structure of the utility. It is, therefore, intended that every utility will customize these SOPs to fit the specific situation and needs of individual utility.

Once customized the SOPs must have the approval of the Board to make them binding. The SOPs must be updated every now and then depending on changes of procedures within the utility, changes in customer needs and any other policy and legislation changes that impinge on the utility operations. In any case SOPs must be revisited at least once a year and at most every two years. The review should be revised by the utility staff that has appropriate training and experience in the process of the respective SOP.
Once these SOPs are put into practice, some of the process steps may be in need of improvement. It is envisaged that a three years period will offer adequate time to test the SOPs and call for the preparation of second edition of this manual.

3

Purpose

The main purpose of developing SOPs is to make procedures systematic, increase efficiency and hence to improve utility operations. The SOPs introduce uniformity in the way activities are performed, the utility operations become transparent and predictable, and generally human resource get utilized more efficiently. The technical and quality requirements are complied with, training needed by staff becomes more visible, and miscommunication gets reduced substantially.

Development of the SOPs

The idea of developing SOPs came from the managers in the course of implementing the capacity development (CD) workshops for the district water supply and sanitation authorities in 2012. It was observed that for one process, like connecting water to new customers, water utilities in the country were using almost the same approach but were achieving results varying, in particular, in quality. New connection workmanship by utility staff was poor and in some cases customers felt not well treated considering that they played their part by paying all necessary new connection charges raised by the utility. Generally speaking, water utilities in the country are performing a number of recurring work processes without properly written procedures. As a result, the quality of those processes is not consistent with the best practice in the water industry.

The concept of SOPs was introduced to 100 water utilities in the face to face workshops held in August to October 2012 in the four centres of Mbeya, Dar es Salaam, Mwanza and Dodoma. The participants were trained on how to prepare, write and format SOPs. In the workshops, participants were asked to form groups to identify the processes in their utilities which could be written down as standard operating procedures. 75 processes were identified in all four centres and these were collated to 29 priority procedures. The identified processes were grouped into 13 technical, 14 commercial and 2 general SOPs. Each utility was then asked to write one or two SOPs of their choice for presentation to CD Project for review and feedback to the participants in the next face to face workshop. A team of resource persons reviewed collated and compiled the SOPs into a coherent document and produced the SOPs first draft document. In the second workshop held in May to June 2013, the participants under the guidance of resource persons developed an example SOP to help them be able to review SOPs better. The participants were then allocated the reviewed SOPs from the first draft document for further improvement. The improvement made by the participants of all the four centres was again put together by a team of resource parsons to produce the draft final document which was reviewed further by an independent reviewer giving rise to this final document.

Contributors

5.1 Contributing Utilities

Region	WSSAs Participating in the Capacity Development Programme	Total in Region
Rukwa	Chala	1
Katavi	Mpanda, Namanyere	2
Mbeya	Vwawa, Chunya, Itumba Isongole, Kyela, Kasumulu, Mbalizi, Tunduma, Tukuyu, Mlowo, Rujewa	10
Iringa	Ilula, Mafinga, Kilolo	3
Njombe	Njombe, Wangin'gombe, Ludewa, Makete, Makambako	5
Ruvuma	Mbinga, Tunduru, Namtumbo	3
Coast	Utete, Chalinze, Mkuranga, Kisarawe, Kilindoni	5
Lindi	Kilwa Masoko, Nachingwea, Liwale, Ruangwa	4
Mtwara	Masasi, Makonde, Mangaka	3
Tanga	Handeni, Korogwe, Pangani, Muheza, Songe, Mombo, Lushoto, Handeni Trunk Main	8
Kilimajaro	Mwanga, Same, Kiliwater	3
Kigoma	Kasulu, Kibondo	2
Kagera	Karagwe, Ngara, Muleba, Biharamulo	4
Mara	Bunda, Tarime, Kiabakari	3
Mwanza	Sengerema, Magu, Ngudu, Misungwi, Nansio	5
Shinyanga	Kahama, Isaka, Kashwasa, Kishapu/Mhunze, Lalago	5
Geita	Geita, Ushirombo	2
Simiyu	Bariadi, Maswa, Mwanhuzi, Malampaka	4
Morogoro	Mikumi, Kilosa, Gairo, Dakawa, Ifakara, Mahenge	6
Dodoma	Kongwa, Mpwapwa, Chamwino, Kondoa	4
Singida	Kiomboi, Manyoni	2
Tabora	Igunga, Sikonge, Urambo, Nzega	4
Manyara	Katesh, Magugu, Mbulu, Kibaya, Gallapo, Bashnet	6
Arusha	Karatu, Monduli	2
	Total	**96**

5.2 Contributing Resource Persons and Trainers

Mr. William Gaudence Landa
Manager Tukuyu WSSA
Postal Address: P.O. Box 1542, Mbeya, Tanzania, East Africa
E-mail: landagaudence@yahoo.com
Mobile: +255 787092042 and + 255715092042

Mr. Joseph Erasto Swai
Commercial Manager Moshi WSSA
Postal Address: P.O. Box 8101, Moshi, Tanzania, East Africa
E-mail: josephswai@yahoo.com/swai@marketplus.co.tz
Mobile: +255 754298429 and +255 777698429

Eng. Abbas P. Muslim
Managing Director Shinyanga WSSA
Postal Address: P.O. Box 298, Shinyanga, Tanzania, East Africa
E-mail: zabbas.pyarali@gmail.com
Mobile: +255 655411777 and +255 762748310

Eng. Alex J. Kaaya
Engineer/Trainer Ministry of Water, former CEO DAWASCO
Postal Address: P.O. Box 35066, Dar es Salaam, Tanzania, East Africa
E-mail: kaalexj@yahoo.co.uk
Mobile: +255 755335870

Dr. Fred Simon Lerise
Head: Capacity Development : GIZ Water Programme Tanzania
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
Postal Address: P.O. Box 1519, Dar es Salaam, Tanzania, East Africa
E-mail: fred.lerise@giz.de
Office: +255 22 2410062
Mobile: +255 754826899

Scope of SOPs

The SOPs in this document cover only the priority operational processes in technical, commercial and a few general areas of the utility activities. Other areas like personnel matters, procurement, finance and administration have their own detailed procedures in their legislation and associated regulations and therefore SOPs have not been developed for them.

SOPs developed for Technical Operations

T1 New Water Connection
T2 Meter Installation
T3 Meter Repair
T4 Meter Testing
T5 Pipe Laying
T6 Leak Detection and Repair
T7 Maintenance of Customer Service Line
T8 Illegal Connection Handling
T9 Water Chemicals Quality Inspection/Compliance
T10 Pipes and Fittings Inspection
T11 Pumps Operations
T12 Water Quality Monitoring at Source and Treatment Plant
T13 Water Quality Monitoring in the Distribution System

SOPs developed for Commercial Operations

C1 Bill and Debts Adjustment
C2 Bill Preparation, Sorting and Dispatch
C3 Revenue Collection
C4 Meter Checking & Replacement
C5 Water Disconnection
C6 Water Reconnection
C7 Debt Management
C8 Customer's Feedback, Enquiries and Handling of Complaints
C9 Updating Customer Details
C10 Communication with the Public
C11 Customers Surveys
C12 Service Delivery Surveys
C13 Meter Reading
C14 Handling Meter Tempering

General SOPs

G1 Material Requisition
G2 Handing Over Office

List of Forms

T1 New Connection Application Form
T2a Customer Water Meter Requisition Form
T2b Meter Installation Application Form
T3 Meter Relocation/Removal Form
T4 Meter Testing Form
T6a Leak Detection Form
T6b Leak Register Form
T6c Job Card Form
T7 Customer Service Line Maintenance Form
T8a Illegal Connection Form
T8b Compensation Claim Form
T9 Water Chemicals Laboratory Test Results Form
T10 Materials Acceptance Form
T11a Pump House Register Form
T11b Pump House Handover Form
T12a Physical and Chemical Water Quality Analysis Form
T12b Bacteriological Water Quality Analysis Form

C1 Bills/Debts Adjustment Form
C2a Meter Reading Log Sheet Form
C2b Bills Distribution Form
C3a Payments by Installments Form
C3b Water Supply Disconnection Form
C4 Customer Meter Check Form
C6 Water Supply Reconnection Form
C8 Customer Care Register Form
C9 Updating Customer Details Form

G1a Materials Requisition Form
G1b Department Consumption Register Form
G2 Handing Over Form

Standard Operating Procedures for Technical Operations

T1

SOP for New Water Connection

Purpose

This SOP describes the steps to be followed by the utility to connect water supply to a new customer.

Responsibility/Accountability

Connecting water supply to new customers is the obligation of the Commercial Department. It is therefore the responsibility of the Commercial Manager to ensure that this SOP is implemented.

Procedure

1. The Commercial Manager issues the application **Form T1** to the Applicant at a fee payable at the cash office.
2. The Cashier receives the application fee and issues a receipt to the Applicant.
3. The Commercial Manager receives a dully filled application form from the Applicant with the signature of the landlord and submits the same to the Technical Manager.
4. The Technical Manager surveys, designs, prepare drawings and cost estimates within 2 days.
5. The Technical Manager signs and submits the costs estimates to the Commercial Manager for invoice preparation.
6. The Commercial Manager provides the invoice to the Applicant.
7. The Cashier receives invoiced amount from the Applicant and issues a receipt.
8. The Commercial Manager constructs the new connection including a water meter within 7 working days following the Pipe Laying (**SOP T5**) and Meter Installation (**SOP T2**) Standard Operating Procedures.
9. The Technician fills and signs the New Connection Completion **Form T1,** which is countersigned by the Applicant, and submits to the Commercial Manager.
10. The Commercial Manager opens a new customer account in accordance with utility regulations.
11. The Commercial Manager updates the data base with the new information within 2 days ready for billing in the following billing cycle.

Performance Indicators

Performance Indicators are the measures which communicate that the procedure is being followed and is working.
The indicators to be used to measure the performance of this SOP is:

a. New Connection Application **Form T1**.
b. Meter Installation **Form T2b**.

SOP for Meter Installation

Purpose

Section 21(1) c of the Water Supply and Sanitation Act 2009 requires the water utilities to install water meters to all customers. Each utility must have metering policy taking consideration the environment within its operating area. This SOP describes the process to be used by the utility in installing water meters.

Responsibility/Accountability

The Commercial Manager is responsible for meter installation.

Meter Installation Procedure

For New Customers

1. The Commercial Manager requests for installation materials, new water meter and fittings from the Storekeeper using **Form T2a.**
2. The Technician constructs the new connection including a new water meter within 7 working days.
3. The Technician fills and signs the Meter Installation **Form T2b** which is countersigned by the customer, and submits it to the Commercial Manager.
4. The Commercial Manager updates the data base with the new information within 2 days ready for billing in the following billing cycle.

For Unmetered Customers

1. The Commercial Manager identifies unmetered customers.
2. The Commercial Manager advises the unmetered customers to fill in the Meter Installation Application **Form T2b**.
3. The Commercial Manager receives a dully filled Meter Installation Form from the customer with the signature of the landlord and submits the same to the Technical Manager.
4. The Commercial Manager requests a new meter and fittings from the Storekeeper by using **Form T2a.**
5. The authorized Technician installs the new meter within 2 working days.
6. The Technician fills and signs the Meter Installation Completion **Form T2b,** which is countersigned by the customer, and submits to the Commercial Manager.
7. The Commercial Manager updates the data base with the new information within 2 days ready for billing in the following billing cycle.

Performance Indicators

Performance Indicators are the measures which communicate that the procedure is being followed and is working.
The indicator to be used to measure the performance of this SOP is:

a. Meter Installation **Form T2b**.

SOP for Meter Repair

Purpose

Water meters may show inaccurate readings due to age, wear and tear, obstruction and physical defects. A meter shall be deemed to be inaccurate and due for repair or replacement, if any error shown is 5% or greater. This SOP describes the steps to be followed by the utility in repairing water meters.

Responsibility/Accountability

The Commercial Manager is responsible for assessing the condition of the meter and forwards it to the Technical Manager for test and repair.

Procedure

1. The Meter Reader reports the malfunctioning meter to the Commercial Manager.
2. The Commercial Manager assesses the situation and if convinced, directs the meter reader to fill in and sign the Meter Removal **Form T3** for his/her approval.
3. The Technician visits the property and removes the malfunctioning water meter and installs a temporary water meter.
4. The Technician investigates the meter at the meter workshop and proposes, whether it can be repaired or discarded and gets the approval of the Technical Manager.
5. The Technical Manager assigns the meter to a skilled technician for repair in the workshop and the technician uses testing equipment to confirm reading accuracy and variation is within 5%.
6. If the water meter is repairable, the Technician repairs the meter, tests the meter following **SOP T4**, fills and signs **Form T3** and submits the same to the Technical Manager for endorsement.
7. The Technical Manager seals the meter after repair and hands it over to the Commercial Manager for re-installation.
8. If the meter is irreparable, the Technical Manager informs the Commercial Manager by filling and signing **Form T3.**

Performance Indicators

Performance Indicators are the measures which communicate that the procedure is being followed and is working.
The indicator to be used to measure the performance of this SOP is:

a. Meter Repair and Performance Test **Form T3**.

SOP for Meter Testing

Purpose

Meter testing is applicable, when a utility staff Meter Reader finds a meter that is not reading properly, an inconsistent consumption pattern as recorded either by a computer or manually over 6 consecutive readings, a customer reports an inconsistency or when a meter has been in use for 5 years. A meter shall be deemed inaccurate if the error is greater than 5%. This SOP describes the steps to be followed to carry out a water meter test.

Responsibility/Accountability

The Technical Manager is responsible for water meters testing within the utility.

Procedure

1. The Commercial Manager authorizes meter testing by filling a Meter Testing **Form T4** and hands it over to the Technical Manager.
2. The Technician authorized by the Technical Manager tests the meter at site or in the meter testing workshop at the utility.
3. On site the Technician installs a calibrated meter in series with the meter to be tested and establishes whether or not there is a difference in the recordings of the two meters.
4. At the workshop, the Technician uses the procedures in place to test and calibrate the meter.
5. The tested meter may be reinstated, repaired (following **SOP T3**) or removed depending on the analysis of the test results.
6. The testing Technician fills and signs **Form T4**, and submits it to the Technical Manager for approval.
7. The Technical Manager submits a copy of the signed **Form T4**, to the Commercial Manager for implementation of the recommendations therein.

Performance Indicators

Performance Indicators are the measures which communicate that the procedure is being followed and is working.
The indicator to be used to measure the performance of this SOP is:

a. Meter Testing **Form T4**.

T5

SOP for Pipe Laying

Purpose

Pipe laying requires quality workmanship especially in trenching, bedding, leveling and jointing. This SOP describes the steps to be followed by the utility in pipe laying.

Responsibility/Accountability

The Technical Manager at the utility is responsible for pipe laying.

Procedure

The authorized Technician:

1. Conducts a preparatory site visit.
2. Ensures that the site is cleared to have a working space.
3. Carries out measurements to reconfirm the distance shown in the design.
4. Marks the width of the trench considering working space requirements inside and outside the trench.
4. Ensures that the trench is dug to the required depth and width in accordance with the measurements.
5. Ensures that the pipe ends and fittings are cleaned.
6. Ensures proper leveling of the trench using bedding material.
7. Connects pipes with fittings. If the pipes are to be joined by welding, they must be welded inside the trench. Fusion pipes are joined outside the trench and then laid inside. Push joints can be joined inside or outside the trench.
8. Ensures the trench is slowly back filled making sure the joints are left exposed.
9. Inspects the joins for leaks after the system has been pressurised. When satisfied the joints are covered with soil.
10. Conducts a pipeline test and upon success prepares a test report.

Performance Indicators

Performance Indicators are the measures which communicate that the procedure is being followed and is working.
The indicator to be used to measure the performance of this SOP is:

a. Pressure/Leak Testing Report.

SOP for Leak Detection and Repair

Purpose

This SOP describes the steps to be taken by the utility to reduce water leakage. It outlines the procedure to be deployed by the staff to detect and repair leaks within the transmission lines, distribution lines and in the customer service lines.

Responsibility/Accountability

The Technical Manager is responsible for leak detection and repair.

Procedure

Procedure for Leak Detection

1. The Technical Manager establishes a mechanism to encourage the general public to report leaks.
2. The Technical Manager forms a leak detection team comprising Technicians, Meter Readers and zones-in-charge.
3. The Technical Manager confirms the leaks reported by the general public, customers or press, by using the leak detection team.
4. The Technical Manager inspects bulk meter readings of established leaks and sends leak detection team to verify.
5. The team detects underground leaks when and where appropriate.
6. The team records every leak in the Leak Detection **Form T6a** and Leak Office Register **T6b** on daily basis.

Procedures for Leak Repair

Procedures for leak repair listed below cover pipes of up to 80mm, 80-200mm and more than 200mm diameter.

For pipes up to 80 mm, the Technician:

1. Prepares a Job Card **Form T6c** from the Leak Register book.
2. Visits the site and with help of artisans exposes the leaking pipe.
3. Assesses the leak and with approval of the Technical Manager requisitions the materials required using **Form G1a**.
4. Repairs the leak and flushes the pipeline.
5. Completes the Job Card **Form T6c**, signs and submits to the Technical Manager for endorsement and records.

Leakage repair instruction for pipes (80 – 200) mm, the Technician:

1. Prepares a Job Card **Form T6c** from the Leak Register book.
2. Visits the site and with help of artisans exposes the leaking pipe.
3. Assesses the leak and with approval of the Technical Manager requisitions the materials required using **Form G1**.
4. Isolates the fault section and drains it.
5. Repairs the leak and flushes the pipeline.
6. Ensures that the water service is restored.
7. Completes the Job Card **Form T6c** signs and submits it to the Technical Manager for endorsement and records.

Leakage repair instruction for pipes more than 200 mm, the Technician:

1. Prepares a Job Card **Form T6c** from the Leak Register book.
2. Visits the site and with help of artisans expose the leaking pipe.
3. Assesses the leak and with approval of the Technical Manager requisitions the materials required using **Form G1a**.
4. If the pipe line is a raising main, pump shut down procedures by pump operator must be followed.
5. Isolates the fault section and drains the main pipeline.
6. Fixes the leak, flushes the pipe section and disinfects the pipeline according to applicable standard procedures.
7. Switches on the pump with the assistance of the Pump Operator according to starting procedures.
8. Ensures that the water service is restored.
9. Completes the Job Card **Form T6c** signs and submits it to the Technical Manager for endorsement and records.

Performance Indicators

Performance Indicators are the measures which communicate that the procedure is being followed and is working.
The indicators to be used to measure the performance of this SOP are:

a. Job Card **Form T6c**.
b. Leak Detection **Form T6a.**
c. Leak Register **T6b.**
d. Materials Requisition **Form G1a.**

SOP for Maintenance of Customer Service Line

Purpose

The objective of maintaining a customer's service line is to repair leaks, replace old pipes and fittings and improve water flow so that customers get reliable water supply. The customer service line is the entire pipeline from the distribution main line to the meter and from the meter into the property. This SOP describes the steps to be taken by the utility to maintain customer water service line.

Responsibility/Accountability

The Technical Manager is responsible for maintenance of customer water service line.

Procedure

1. The Commercial Manager receives information on malfunctioning of a customer service line from the public, Meter Readers, zones-in-charge and Leak Detection Team.
2. The Technician visits the site, assesses the customer service line problem and gets consent using the Customer Service Line Maintenance **Form T7** from the customer to rectify the situation.
3. The Technician prepares the cost estimates.
4. The Technical Manager approves the cost estimates and issues an invoice to the customer.
5. The Cashier receives the invoiced amount, issues a receipt to the customer and a copy to the Technical Manager.
6. The Technical Manager instructs the Technician to prepare a job card for resolving the problem.
7. The Technical Manager approves the requisitioned materials from stores using **Form G1a**.
8. The Technician repairs the service line, tests and restores the service.
9. The Technician asks the customer to sign **Form T7** upon successful completion of the work.
10. The Technician submits **Form T7** to the Commercial Manager as a record.
11. The Technician completes the Job Card **Form T6c** signs and submits it to the Technical Manager for endorsement and record keeping.

Performance Indicators

Performance Indicators are the measures which communicate the procedure is being followed and is working.
The indicators used to measure the performance of this SOP are:

a. Customer Service Line Maintenance **Form T7.**
b. Job Card **Form T6c.**

SOP for Illegal Connection Handling

Purpose

An illegal connection is a customer service line, which has not been authorized by the utility. This SOP describes the procedure for dealing with water theft through illegal connection to the utility infrastructure.

Responsibility/Accountability

The Technical Manager is responsible for handling all illegal connections in the utility.

Procedure

The Technical Manager

1. Prepares and files a formal report, including evidence that can be used in the court of law and fills and signs the Illegal Connection **Form T8a**.
2. Submits the form to the Utility Manager for endorsement.
3. Assists the Utility Manager after verification in rewarding the person who reported the illegal connection.
4. Disconnects the illegal connection.
5. Computes the compensation and writes a letter using **Form T8b** to the illegal consumer, signed by the Utility Manager.
6. Invites the illegal consumer to the office for further discussions and agrees on a payment plan for the compensation amount and completes **Form T8b**.
7. Submits the **Form T8b** to the Commercial Manager for payment purposes.

The Commercial Manager

1. Monitors the payments and provides evidence that the compensation is being paid as agreed.
2. Once the compensation payment is finalized he initiates new connection procedures in accordance to **SOP T1**.

Performance Indicators

Performance Indicators are the important measures which indicate the procedure is working. For this SOP the following indicators will be used:

a. Illegal Connection **Form T8a.**
b. Compensation **Form T8b.**

T9

SOP for Water Treatment Chemicals Quality Check

Purpose

Section 9(d) of the Water Supply and Sanitation Authorities Operation Guidelines included in the Memorandum of Understanding between the utilities and the Ministry of Water 2012, requires utilities to ensure that chemicals used for treatment of water are safe and fit for treating water for human consumption. This SOP describes the procedure to be taken by the utility to ensure the procured chemicals meet the required quality standards.

Responsibility/Accountability

The Procurement Officer is responsible for the quality of the chemicals supplied. The Stores Officer is responsible for the safe upkeep of the chemicals in the go down/stores of the utility.

Procedure

1. The Technical Manager prepares detailed specifications of water treatment chemicals to be procured.
2. The Procurement Officer, through tender or quotation, invites the supply of chemicals based on the specifications prepared by the Technical Manager.
3. The Procurement Officer asks the suppliers to submit samples of their chemicals as required in the tender or quotation.
4. The Procurement Officer submits the samples to a recognized and qualified laboratory for quality testing.
5. The laboratory issues a signed quality report of the test results with recommendations (**Form T9**).
6. If the chemicals meet the specifications, the supplier is authorized by the Procurement Officer to deliver the chemicals.
7. The Procurement Officer rejects the tender/quotation, if the chemicals do not meet the specifications and informs the supplier accordingly.
8. Once the chemicals are in the stores, the Stores Officer invites the testing laboratory to take random samples for further testing.
9. The testing laboratory issues a report/certificate of the tests results and recommendation of the usability and efficacy of the chemicals (**Form T9**).
10. If the chemicals fail to meet specifications, the Stores Officer reports this to the Utility Manager, who seeks redress from the supplier.

Performance Indicators

Performance Indicators are the important measures which indicate the procedure is working. For this SOP the following indicator will be used:

a. Lab Results **Form T9**.

SOP for Pipes and Fittings Inspection

Purpose

Pipes and fittings are one of the most important supplies to the water utilities. Substantial amount of money is used in their procurement. It is a prerequisite that correct specifications are drawn and materials supplied meet the requirements. The adage that what you see is what you get applies, unless you inspect diligently what you receive in your stores.

Responsibility/Accountability

The Technical Manager is responsible for inspecting and ascertaining the quality of the supplied pipes and fittings vis-a-vis the specifications.

Procedure

1. The public procurement guidelines stipulate that all receivables into the stores should be inspected before being accepted.
2. Once the pipes and fittings are brought to the stores, the inspection team is appointed by the Chief Executive and called-in by the Store's Officer.
3. The Inspection Team, comprising members from the technical department knowledgeable about pipes and fittings, checks the supplies against the requisition and the specifications.
4. The Inspection Team signs the Inspection Acceptance **Form T10,** in case pipes and fittings are acceptable in quality and quantity or rejects them in part or in full.
5. Accepted pipes and fittings are received into the stores and a Goods Received Note (GRN) is issued by the Store's Attendant.
6. The User Department is informed by the Store's Officer of the availability of their requisitioned pipes and fittings in stores.
7. This procedure is applicable to all other materials received in the stores.

Performance Indicators

Performance Indicators are the important measures which indicate the procedure is working. For this SOP the following indicators will be used:

a. Inspection Acceptance **Form T10.**
b. Goods Received Note.

T11

SOP for Pumps Operations

Purpose

Standard procedures need to be followed by Pump Operators in their day to day activities. The dos and don'ts help maintain the pump house, pumps, motors and equipment installed therein as well as the external surroundings.

Responsibility/Accountability

The Pump Operators are technical staff of the authority and report to the Technical Manager. The Pump Operators are responsible for the well being of the pump house and its constituents and accurate record keeping.

Procedure

The Pump Operator

1. Records the time of entry into pump house to start work/shift.
2. Reads the handover notes left by the leaving shift operator.
3. Discusses the operational status of the pump house equipment with the leaving shift operator.
4. Inspects all equipment to confirm and assesses the accuracy of the handover notes before countersigning the notes.
5. Records at every hour, in the provided Pump House Register (**Form T11a**), the data of functionality of the equipment in the pump house. The records include discharge, head, amperage, voltage, temperature, water levels etc. as pre-determined by the utility management.
6. Records any abnormal occurrences[1] in the pump house by showing time of occurrence, possible cause(s), and reports to the supervisor promptly.
7. Records all instructions regarding switching on or off of a pump, showing the time and name of the instructor.
8. Cleans the equipment such as pumps, motors, engines etc. and the pump house and its external surroundings, including floor sweeping and slashing grass between the top of the hours.
9. Leaves at the end of the shift only after handing over the pump house to the next Pump Operator (**Form T11b**).

Performance Indicators

Performance Indicators are the important measures which indicate the procedure is working. For this SOP the following indicators will be used:

a. Pump House Register **Form T11a.**
b. Cleanliness of pump house and its surroundings.

[1] Abnormal occurrences' include power failure, excessive noise, excessive vibrations, excessive temperatures, pump/motor/engine failure, electrical problems and depletion of water from the sump.

SOP for Water Quality Monitoring at Source and Treatment Plant

Purpose

The purpose of water quality monitoring at source and in the treatment plant is to determine the quality of raw water and its seasonal variations and the quality of water after treatment so that appropriate chemicals may be applied in the right doses to efficiently produce affordable potable water. This SOP describes the procedure to be taken by the utility to monitor quality of water at source and in the treatment plant.

Responsibility/Accountability

The Technical Manager is responsible for water quality monitoring at source and in the treatment plant.

Procedure

The Laboratory Technician

1. Observes the water source surroundings to note abnormal occurrences or materials in the source that might affect the quality of water.
2. Takes a sample of raw water from the **source and in the treatment plant** at every hour for analysis in the laboratory.
3. Analyses predetermined physical, chemical and bacteriological parameters in the lab of the utility or in the Ministry of Water laboratory.
4. Fills Water Quality Analyses Forms (**Forms T12a; T 12b**) to record the result of the analyses.
5. Uses the results to provide early warning to the Technical Manager on adverse variations in the quality of raw water.
6. Uses the results to improve the quality of treated water and informs the Technical Manager, if the available water treatment chemicals are not able to treat the water adequately.
7. Informs the Technical Manager on the consumption trends of water treatment chemicals and its implication on chemicals stocks in the store.

Performance Indicators

Performance Indicators are the important measures which indicate the procedure is being applied and is working. For this SOP the following indicators will be used:

a. Complete Water Quality Analyses **Forms T12a** and **T12b.**

T13

SOP for Water Quality Monitoring in the Distribution System

Purpose

This SOP describes the process of water quality monitoring in the distribution system. It outlines how effective water quality monitoring should be performed and how it assists the utility in monitoring its quality control and quality assurance compliance. Applying this SOP, a utility ensures the water supplied to customers is fit for human consumption.

Responsibility/Accountability

Water quality monitoring is the responsibility of the Technical Manager.

Procedure

1. Water supplied to customers (whether from Treatment works or from Boreholes) shall meet the Tanzanian Potable Water Quality Standards.
2. The Technical Manager is responsible for the treated water quality compliance in respect of potable water delivered to the customer by collecting samples for scientific analysis.
3. The Laboratory Technician takes samples of water at sampling points identified earlier with or without assistance of the nearby laboratory of the Ministry of Water.
4. Sampling is done by the utility laboratory staff once a week and the Ministry of Water laboratory, at a fee, once every month.

Physical Analysis - The Laboratory Technician:

1. Collects water samples.
2. Labels all water samples, indicating the point from where the sample is taken, date and time.
3. Registers all samples and stores them in cool conditions.
4. Analyses the samples to check, if the agreed parameters are within Tanzanian standards.
5. Enters/records the analysed data in a parameter register/computer **(Form T12a).**
6. Fills analysis **Form T12a** in duplicate (one for customer copy).
7. Dispatches results to the Technical Manager for action.

Chemical Analysis - The Laboratory Technician:

1. Collects water samples.
2. Labels all water samples, indicating the point from where the sample is taken, date and time.
3. Registers all samples and stores them in cool conditions.
4. Checks, if agreed chemical parameters are within Tanzanian standards.
5. Enters/records the analysed data in a parameter register/computer **(Form T12a).**
6. Fills analysis **Form T12a** in duplicate (one for customer copy).
7. Receives comments from the head of water quality laboratory regarding the parameter results.
8. Dispatches results to the Technical Manager for action.

Bacteriological Analysis - The Laboratory Technician:

1. Collects water samples.
2. Labels all water samples, indicating the source from where the sample was taken, date and time.
3. Registers all samples and stores them in cool conditions.
4. Checks/analyses three forms of bacteria, if water has not been contaminated. The bacteria checked are total coliforms, faecal coliforms and faecal streptococci.
5. Enters/records the analysed data in a parameter register/computer.
6. Fills analysis **Form T12b** in duplicate (one customer copy).
7. Seeks comments from the head of water quality laboratory regarding the parameter results.
8. Dispatches results to the Technical Manager for action.

Performance Indicators

Performance Indicators are the important measures which indicate the procedure is working. For this SOP the following indicators will be used:

a. Physical and Chemical Water Quality Analysis **Form T12a**
b. Bacteriological Water Analysis **Form 12b**

C

Standard Operating Procedures for Commercial Operations

C1

SOP for Bill and Debts Adjustment

Purpose

Customers must pay for what they consume, no more and no less. The National Water Policy 2002 and the Urban Water Supply and Sanitation Act No. 12 of 2009 emphasizes the importance of customers to pay for what they consume. Utility practices must be honest, transparent and accountable to attain customer satisfaction, a key ingredient for achieving utility sustainability.

This SOP describes the internal control mechanism for utility staff to adjust customers bills and debts as and when necessary.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to monitor, control and follow up on customers' bills and debt adjustments.

Procedure

The Billing Clerk

1. Receives a customer's complaint about an unusual bill/debt, detects unusual customer bills/debts or receives an order of debts provision from the utility Commercial Manager **[See SOP C7].**
2. Assesses trends and re-calculates and debits or credits a customers bill/debt.
3. Fills in Bills/Debts Adjustment **Form C1** with the correction of the customers bill/debt.
4. Seeks authorisation from the Commercial Manager for the correction of the bill/debt.
5. Makes the adjustment to the bill/debt in the customer's account or ledger.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP the following indicator will be used:

a. Bills/Debts Adjustment **Form C1**.

SOP for Bill Preparation, Sorting and Dispatch

Purpose

Article 4.2 of The National Water Policy of 2002 emphasizes the importance of WSSAs to ensure a full cost recovery of its services through the improvement of billing, metering, and revenue collection. This SOP describes an internal control mechanism for timely preparation, sorting and dispatching of accurate customers bills.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to monitor, control and follow up on bill preparation and sorting for timely dispatch to the customer.

Procedure

1. The Meter Reading Supervisor provides the Billing Clerk with the meter reading sheets or data loggers from metered customers and the sales estimates for unmetered customers.
2. The Billing Clerk enters the sales estimates or meter readings in the Meter Reading Log Sheet (**Form 2a)** or in a computerised system.
3. The Billing Clerk circulates the customer ledger books or a printout of the meter reading log sheets to the Meter Reader for corrections.
4. The Billing Clerk checks corrections and submits to the Meter Reading Supervisor a final version of meter reading log sheet and/or a summary of billed customers' accounts.
5. The Meter Reading Supervisor seeks approval and authorisation from the Commercial Manager to print the final bills.
6. The Billing Clerk receives authorisation order from the Commercial Manager and prints the customer bills (metered or unmetered).
7. The Meter Reader collects and sorts the printed customer bills.
8. The Meter Reader or Bill Distribution Agent collects the final bills and dispatches them to the customers using procedures agreed by the utility.
9. The Meter Reader or Bill Distribution Agents returns the Bills Distribution **Form C2b** to the Meter Reading Supervisor.
10. The Meter Reading Supervisor assesses the performance of the customers bill distribution and reports to the Commercial Manager.

Performance Indicators

The Performance Indicators are important measures which communicates that the procedure is working. For this SOP the following indicators will be used:

a. Meter Reading Log Sheet **Form C 2a.**
b. Bills Distribution **Form C2b.**

SOP for Revenue Collection

Purpose

Article 4.2 of The National Water Policy of 2002 and Section 20(i) of the Water Supply and Sanitation Act No. 12 of 2009 provides collecting revenue as a basis for improving services delivery for water utilities. This SOP describes the steps to be taken by the utility to collect revenue.

Responsibility/Accountability

The Commercial Manager is responsible for revenue collection.

Procedure

The Commercial Manager

1. Collects meter reading log sheets from the Billing Clerk and Customers Bills Distribution Report from the Meter Reader or the Bill Distributor.
2. Assesses and develops the revenue collection strategies and plans.
3. Sets revenue collection targets for the staff responsible for revenue collection with respect to monthly billing targets.
4. Ensures that all utility customer pay-points operate efficiently.
5. Conveys messages/information to customers reminding them to pay their bills in time.
6. Collects, assesses and reconciles customers payment information from pay-points.
7. Uses Payment by Installment **Form C3a**, to enter into agreements with customers, who are not able to pay the entire bill amount at once.
8. Prepares Customer's Disconnection Note (**Form C3b)** for customers, who default in their payments.
9. Prepares a list of defaulting customers and orders disconnection.
10. Carries out disconnections as described in **SOP C5** in collaboration with the Technical Manager.
11. Prepares a revenue collection report at the end of every month and submits it to the Utility Manager.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is being used and is working. For this SOP, the following indictors will be used:

a. Payment by Installment **Form C3a.**
b. Customer's Disconnection Note **Form C3b.**

SOP for Meter Checking & Replacement

Purpose

A water meter is a "Utility Cash Box". It must be protected and checked all the time to ensure accurate readings. This SOP describes an internal control mechanism for ensuring the customers water meters are checked, well maintained and protected, so as to enhance customer's satisfaction, sustain water sales and hence increase utility's revenue collection.
There are several reasons for replacing customers water meters. They include malfunctioning due to age, breakage and vandalism.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to monitor, control and replace customer water meters.

Procedure

1. The Commercial Manager, on a daily basis or from time to time, assigns Meter Readers or Plumbers with a task of checking and identifying customers water meters which need repairs or replacement
2. The Meter Reader/Plumber identifies and indicate meters that need to be replaced/repaired and reason.
3. The Meter Reader/Plumber fills in a Customer Meter Check **Form C4** and submits to the Commercial Manager.
4. The Commercial Manager approves and authorizes the replacement of customer's water meter according to the utility guidelines as included in the Utility Metering Policy and **SOP T2.**

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. Customer Meter Check **Form C4**

SOP for Water Disconnection

Purpose

This SOP describes an internal control mechanism for maximizing customer's satisfaction. It ensures that utility water supply operations, especially disconnecting customers who do not pay their bills and debts on time, are carried out in an honest, professional and unbiased manner.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to monitor, control and make follow up of disconnecting water supply services to customers who have not paid their bills on time (depending on Utility Policy) so as to improve utility revenue collection. For this SOP, Commercial Manager is held responsible and accountable.

Procedure

1. Commercial Manager establishes reasons for disconnecting customer's water supply
2. Utility Management from time to time establishes actions to be taken by customers to reinstate water supply service
3. Customers Relations Staff carries out communications at all times on actions to be taken by the customers and utility during disconnections and reinstatement of water service
4. Customers Relations Staff designs, prints and circulates Customer's Disconnection Notes to responsible utility staff
5. Revenue Collection Staff receives approved list and disconnects defaulting customers
6. Plumbers and Artisans surveys the networks, decides and/or seek approval from high authority on which type of water service disconnection should be undertaken (*including Meter removal, Disconnection from the main line and Uprooting customer's service line*)
7. Utility's staff disconnects water services and leaves signed Customer's Disconnection Note to customers with action(s) to be taken to reinstates service
8. Revenue collection staff makes continuous follow-ups to motivate disconnected customers to take their water service reinstatement actions. [**Refer to SOP C6**]

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicators will be used:

a. Number of disconnected customers.
b. Number of customers paid on time.

SOP for Water Supply Reconnection

Purpose

Utility may disconnect services to a customer for various reasons. Once the problem is resolved services must be restored. This SOP guides the process through which disconnected customers are reconnected to water supply.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to control reinstatement of water supply services to customers.

Procedure

1. The Commercial Manager ensures that a disconnected customer is due for re-connection.
2. The Commercial Manager prepares and issues a Water Supply Reconnection **Form C6** to the utility technician responsible for reconnection.
3. The Technician orders reconnection fittings from the stores, if they are required.
4. The Technicians visits the premises of the customer and reconnects the water supply.
5. The Technician informs the customer, or their representative, that water supply has been restored and the customer signs the Water Supply Reconnection **Form C6**.
6. The Technician countersigns and hands the form to the Commercial Manager.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. Water Supply Reconnection **Form C6.**

SOP for Debt Management

Purpose

The Memorandum of Understanding between the utilities and the Ministry of Water stipulates that the average accounts receivable, i.e. customer's debts, should not exceed 3 months.

This SOP guides the process of collecting arrears from unpaid water and sanitation bills.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to manage debts from water sales and sanitation services.

Procedure

1. The Commercial Manager prepares and compiles a **list of utility** debtors at the end of every month.
2. The Commercial Manager assesses and decides on the procedure to apply to each individual or group of debtors and implements it.
3. The Commercial Manager prepares a list of bad debts of customer's debts that are not correct or are correct but not collectable and submits it to the Utility Manager for approval.
4. The Utility Manager presents the proposed list to the Board of Directors for decisions on whether the debts can be written-off.
5. The Utility Manager instructs the Commercial Manager to adjust all the Board approved bad debts in accordance with **SOP C1**.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. List of Board Approved bad debts.

SOP for Customer's Feedback, Enquiries and Handling of Complaints

Purpose

This SOP defines an approach to manage feedback, enquiries and complaints received by the utility. In this SOP customer feedback means information provided to the utility by a customer with regard to services provided by the utility.

Responsibility/Accountability

It is the responsibility of the Customer Relations Officer to manage customers' feedbacks, enquiries and complaints.

Procedure

Customer's feedback

1. The Customers Relations Officer receives customers feedback through letters, faxes, emails, phone calls and walk-in customers.
2. The Customers Relations Officer records on a daily basis customers feedbacks in Customers Feedbacks Register (**Form C8**) or on a computer data base.
3. The Customer Relations Officer responds in writing, by phone, email or directly to the customer acknowledging the feedback.
4. The Customers Relations Officer forwards the feedback to the appropriate utility staff member if customers feedback needs further action.
5. The responsible utility staff member acts on the customers feedback and communicates back to the Customers Relations Officer.
6. The Customers Relations Officer provides feedback to the respective customer and updates the utility register/data base.

Enquiries

1. The Customers Relations Officer ensures that all utility forms, brochures leaflets and flyers are available for distribution to enquirers.
2. The Utility's Customers Relations Officer records on a daily basis all enquiries in a Register Book or computer data base.
3. The Customers Relations Officer provides direct answer to the customer including assistance to fill in any utility forms if the enquiry doesn't need attention of another utility officer.
4. The Customers Relations Officer acknowledges receipt of the enquiry, and gives a time frame to provide response to enquirer if the enquiry needs action of another utility officer
5. The Customers Relations Officer forwards/dispatches the enquiry to the appropriate utility staff member.
6. The responsible staff member acts on the enquiry and informs the Customers Relations Officer that the assignment is completed.
7. The Customers Relations Officer provides feedback to the respective customer and updates the utility customer care register book/data base (**Form C8**).

Handling of Complaints

1. The Customers Relations Officer receives and records customer's written complaint in the register/computer data base.
2. The Utility's Customers Relations Officer acknowledges receipt of the complaint and informs the customer of the time frame to provide a response to the complaint.
3. The Customers Relations Officer dispatches the customer's complaint to the appropriate utility staff member.
4. The responsible staff member acts on the complaint and informs the Customers Relations Officer that the complaint has been dealt with.
5. The Customers Relations Officer provides feedback to the respective customer and updates the utility register/data base **Form C 8**.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. Customer Care **Form C8**.

SOP for Updating Customer Details

Purpose

There are many reasons as to why customer details need to be updated. They include changes in contact addresses, ownership of property, type of water use and relocation.

This SOP describes an internal control mechanism for ensuring that customer's details are continuously and securely updated and cannot be tampered with by an un-authorized person. Updating customer's details can be initiated by customers themselves or the utility.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to maintain and update the customer database.

Procedure

1. The Commercial Manager decides, based on the utility policy or customer request, to update customer details.
2. The Commercial Manager requests customers to provide the details.
3. The utility's designated staff or agent fills the provided details in a prescribed utility **Form C9**.
4. The Commercial Manager checks the form for completeness with adequate supporting evidence and approves the form by signing it.
5. The Commercial Manager hands over the signed form to the data entry officer who updates the data base accordingly.
6. The Data Entry Officer files the signed form for future reference.
7. The Commercial manager confirms the effected changes ready for billing.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. Customer Details **Form C9.**

SOP for Communication with the Public

Purpose

It is quite important to maintain and improve understanding and cooperation between the utility and its public. The purpose of this SOP is to have an internal control mechanism for improving the process of communicating with the public about the utility and its activities so that the utility can enhance public support.

Responsibility/Accountability

It is the responsibility of the Utility Public Relations Officer (PRO) to ensure that the public is aware of utility operations, development and future plans.

Procedure

The PRO

1. Identifies information which needs to be communicated to the public. PRO prepares a draft of Public Information Concept and shares it with a department, section or unit responsible with the matter.
2. Presents the Draft Concept to the utility manager for approval.
3. Establishes outreaches points/tools to ensures utility messages are actively picked up by the public and or agencies.
4. Prepares a first draft of Public Information Material and seeks utility manager's approval.
5. Conducts public message delivery actions through selected outreaches points/tools.
6. Evaluates the message impact and prepares and submit report to the Utility Manager.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP the following indicators will be used:

a. Public Information Material.
b. Impact Report.

NB: Outreach points/tools = Public Service Announcements; Public meetings and workshops; Television, print, or radio interviews; Outreach to specific reporters; News Release; News Brief.

C11

SOP for Customer Surveys

Purpose

This SOP describes an internal mechanism for conducting systematic customer surveys. Utilities carry out customer surveys mainly for updating the customer data base. Customer surveys enable utilities to keep their data base updated and help to take better decisions in order to improve quality, efficiency and effectiveness of service delivery.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to ensure that customer's information is collected, stored, updated, and readily available for decision making.

Procedure

1. The Commercial Manager establishes needs and allocates required resources to conduct customers' survey.
2. The Commercial Manager establishes a customer's survey team and appoints a Team Leader.
3. The Team Leader designs a questionnaire and finalizes it with team members.
4. The Team Leader presents the questionnaire to the Commercial Manager for approval.
5. The Team Leader trains members of the survey team on how to use and fill in the approved questionnaire.
6. The Team Leader identifies an area/sub area for data collection and instructs the survey team to carry out the data collection exercise.
7. The Customers Survey Team carries out the data analysis exercise and prepares the draft report.
8. The Customers Survey Team Leader produces a Survey Report and submits it to the Commercial Manager.
9. The Commercial Manager proposes corrective measures to be undertaken by the utility based on the survey report.
10. The Commercial Manager presents the proposal to the Utility Manager for approval and implementation.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. Customer Survey Report.

SOP for Service Delivery Surveys

Purpose

The purpose of this SOP is to have an internal control mechanism for conducting systematic service delivery surveys (SDS). Utilities carry out SDS for purposes of determining level of utility's service delivery to its customers and the public at large. SDS enables utility to make sound decisions in order to meet required service delivery standards as required by EWURA.

Responsibility/Accountability

The Utility Manager is responsible and accountable for this SOP.

Procedure

1. The Utility Manager establishes the need and extent; then allocates the required resources to conduct a service delivery survey.
2. The Utility Manager decides whether the service delivery survey is carried out by the utility staff or, if it is to be out-sourced.
3. The Utility Manager establishes a service delivery survey team and appoints its Team Leader.
4. The Team Leader and the survey team design the service delivery survey tools and process, which are then taken to the Utility Manager for approval.
5. The Team carries out the survey.
6. The Team Leader analyses the information collected and drafts a survey report.
7. The Team Leader presents the survey report to the Utility Manager for endorsement.
8. The Utility Manager then discusses the report with the utility management team and agrees on the actions to be taken accordingly.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. Service Delivery Survey Report.

C13

SOP for Meter Reading

Purpose

The National Water Policy 2002 emphasizes the importance of attaining universal metering for all utilities in Tanzania. This SOP describes an internal control mechanism for meter reading upon which accurate bills can be prepared.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to monitor, control and follow up on customers meter readings.

Procedure

1. The Meter Reading Supervisor prepares and prints the updated zone-wise or area-wise Meter Reading Sheets in accordance to agreed meter reading routes.
2. The Meter Reading Supervisor seeks review and approval of the meter reading sheets from the Commercial Manager.
3. The Meter Reading Supervisor allocates updated and approved meter reading sheets or updated data loggers (for utilities using a computerized system) to the Meter Reader.
4. The Meter Reader visits customers' properties and records accurately each meters information in the provided Meter Reading Sheets (**Form C2a)** or by data loggers.
5. The Meter Reader submits the filled-in meter reading forms or data loggers to the Meter Reading Supervisor.
6. The Meter Reading Supervisor checks that the Meter Reading Sheets are complete and visits few randomly selected meters to confirm the readings.
7. The Meter Reading Supervisor decides which readings should be revisited and which ones are to be submitted to the Billing Officer for billing purposes.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicators will be used:

a. Meter Reading Route Maps.
b. Meter Reading Log Sheet **Form C2a.**

SOP for Handling Meter Tempering

Purpose

This SOP describes an internal control mechanism to systematically improve the identification of meters that have been tampered with and to rectify the situation.

Responsibility/Accountability

It is the responsibility of the Commercial Manager to monitor, control and make follow up on utility water losses associated with meter tampering.

Procedure

Designated Utility Staff:

1. Identifies meters that have been tampered with in accordance with utility policy.
2. Obtains and document evidence of tampering with the meter.
3. Computes compensation amount based on utility policy.
4. Presents compensation claim **Form T8b** for payment to the customer, responsible for the meter tampering.
5. In case the compensation is not paid, seek court redress through a utility legal officer.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicators will be used:

a. Compensation Claim **Form T8b.**
b. Registered Court Cases.

G

General Standard Operating Procedures

SOP for Material Requisition

Purpose

This SOP describes an internal control mechanism for materials from the utility stores that are used by various departments in accordance with the annual plan and budget.

Responsibility/Accountability

It is the responsibility of the Human Resources Officer to ensure that appropriate requisitioning forms are used, when requesting materials and that the store inventories are managed adequately.

Procedure

1. The user department fills a pre-numbered purchase requisition form.
2. The user department submits the purchase requisition to the procurement unit for procurement purposes.
3. The stores officer receives required materials into the stores from the supplier after inspection and approval of the deliveries.
4. The stores officer informs the user department on receiving the materials from the suppliers.
5. The user department completes the pre-numbered material requisitioning and issuing **Form G1a** and submits it to stores.
6. The stores officer issues the materials to the user department.
7. The user department signs the issue note and collects materials from the stores.
8. The user department uses the materials and maintains own consumption register (**Form G1b**) for auditing purposes.

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicators will be used:

a. Material Requisitioning and Issuing **Form G1a**.
b. Consumption Register **Form G1b.**

SOP for Handing Over Office

Purpose

This SOP is to ensure the smooth transition of utility undertakings, when an officer leaves the office on permanent or temporary terms. The leaving officer will be required to hand over his office duties and planned activities to another officer, when proceeding on either a safari, leave, resignation, termination or transfer.

Responsibility/Accountability

It is the responsibility of the Human Resources Officer to ensure that handing over is undertaken to maintain smooth running of utility operations and activities.

Procedure

1. The leaving officer must secure/have a written authorization to leave the utility.
2. The leaving officer identifies a person or seek an appointee from his immediate superior to act on his behalf.
3. The leaving officer holds discussion with the appointee with regard to the handing over duties.
4. The leaving officer writes a formal letter to the appointee as discussed in (3) above with copies to relevant colleagues, immediate superior and the handing over file.
5. If the officer is leaving the office due to resignation, termination or transfer, he shall also hand over office, files, tools, equipment, etc by filling in duplicate the Handing Over **Form G2.**

Performance Indicators

The Performance Indicators are important measures which communicate that the procedure is working. For this SOP, the following indicator will be used:

a. Handing Over Form **Form G2.**

F

Standard Operating Procedure Forms

Form T1: New Connection Application

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Application No.:

Section 1: Customer Details

Name:	
Postal Address:	
Phone/Mobile Number:	
Email Address:	
A/C No(if applicable):	

Declaration: I, hereby apply for the water supply service as detailed in this application form in accordance to Water Supply and Sanitation Act of 2009. I confirm to abide to the act and its regulations as part of my obligation as a customer.

Type of application*(please tick)*

☐ New Water Connection ☐ Disconnection ☐ Alteration ☐ Maintenance

Premises for application applied for:

Plot No:	Block:	House No:
Ward:	Street:	Zone:

NOTE: The works shall only be done by the Authority or Certified Contractor approved by the Authority. Cost for construction including the materials shall be borne by the customer. Construction works shall begin upon payment of the invoice given to the customer. Time for completion of works shall be 7 working days from the payment date. The water meter installed shall be under direct custody by the customer, any damage shall be penalized in accordance to the Authority Regulations and Water Supply and Sanitation Act, 2009.

……..	…….	…….	…….	…….
Name of Applicant	Signature	Date	Signature	Date
……..	…….	…….	*Commercial Manager*	
Name of Property Owner	Signature	Date		

Section 2: For Official Use

Name of Technician:		Survey Date:	Time:	
Possibility of getting water supply to the premises *(please tick)*		☐ **YES**	☐ **NO**	
GPS Coordinates to Customer		GPS coordinates of Connection point		
Easting:	E o	Easting:	E	o
Southing:	S o	Southing:	S	o
Elevation:	m	Elevation:		m
Expected Number of water users at the premises :				
Type of Toilet Available *(please tick):*	☐ Pit Latrine	☐ On Site Sanitation	☐ Sewerage Network	
Type of Consumption applied	☐ Domestic	☐ Commercial	☐ Institution	☐ Industry ☐ Kiosk
Authorised by Technical Manager:	☐ YES	☐ NO		

……. …….	Amount Paid:……..	…… ……	
Signature Date	RRV No.:……..	Signature	Date & Stamp
Technical Manager		*Receiving Officer*	
Customer Connected *(please tick)* ☐ YES ☐ NO	Size of Main line: mm	Service line size: mm	
Total Distance from main to Customer: m	Depth of trench: cm	Taping Size: mm	
……. …….	A/C No:……..	…… ……	
Signature Date	Meter No.:……	Signature	Date & Stamp
Technician (connected service)		*Commercial Manager*	

Form T2a: Customer Water Meter Requisition

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Voucher No:

To: Stores Officer/In Charge

Please issue the Water Meters to be installed for the following listed Customers:

S.No	CUSTOMER NAME	METER No.	A/C No.	WARD	ZONE	PURPOSE FOR INSTALLATION	SERIAL No OF OLD METER	REMARKS

Details of Water Meters and associated connecting Materials required:

S.No.	DESCRIPTION	UNIT	QUANTITY REQUIRED	QUANTITY AUTHORISED

1. Requesting Officer/Plumber

Name: ……. *Signature:* …… *Date:* ……

2. Approving Officers

Name: ……. *Signature:* …… *Date:* ……

Head of Dept/Section/Zone In Charge

Name: ……. *Signature:* …… *Date:* ……

Head of Database and Billing Section

Name: ……. *Signature:* …… *Date:* ……

3. Authorized by MD/TM

Name: ……. *Signature:* …… *Date:* ……

4. The Meter(s) named above have been issued to:

Name: ……. *Signature:* …… *Date:* ……

5. Issued by Supplies Officer

Name: ……. *Signature:* …… *Date:* ……

6. In the Presence of Meter Shop Supervisor

Name: ……. *Signature:* …… *Date:* ……

Form T2b: Meter Installation/Replacement Application

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Voucher No:

Section 1: To be filled by Commercial Manager

Customer Name:	
A/C No.:	Meter No.:
Zone:	Ward/Street:
RE: REQUEST FOR A NEW WATER METER INSTALLATION /REPLACEMENT TO THE MENTIONED CUSTOMER	
…….. Signature (Commercial Manager)	…….. Date

Section 2: Stores Section

Water meter Type:	Serial No:	Size:	Initial Reading:
…….. Signature (Stores Officer)		…….. Date	Meter Issued to:

Section 3: Technical Section

Technician Name:		Designation:	
Old Water meter Type:	Old Serial No:	Old Size:	Last Reading:
New Water meter Type:	New Serial No:	New Size:	Initial Reading:
…….. Signature (Technician)		…….. Date	Remarks:

Section 4: Customer Obligations

i. To cooperate with the Authority in all aspects regarding Information and access to the premises for the purpose of meter reading, Installations and maintenance.

ii. To make sure all water consumed must pass through the water meter and registered appropriately

iii. To take care and provide security to the installed water meter in his/her premises against vandalism, fraud, theft, misuse, tempering. Short of this shall be considered conspiring to use water against the Water Supply and Sanitation act of 2009. The consequences shall be the customer to pay as per damage registered and in some cases shall be prosecuted in accordance to the Law.

Declaration: I the undersigned declare to understand the obligations vested on me, and agree to abide thereof.

…… Name Signature (Customer)	…….. Date	ID:

Section 5: Billing Section

Name of Billing Officer:	
Customer Details have been logged into register and in the computer billing system. ☐ YES ☐ NO	
…….. Signature (Billing Officer)	…….. Date

Form T3: Meter Relocation/Removal

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Voucher No:

Section 1: Applicant Details: (*to be filled by customer***)**

First Name: ……	Middle Name: ……	Last Name: ……
Company Name (*if applicable*): …….		
A/C No.: ……...	Zone: ……..	Location: ……
Postal Address: ……	Email: …….	Mobile: ……
Signature: …….....		Date: ……

Section 2: Existing Meter Details: (*to be filled by Authority Personnel***)**

Serial No.: ……	Type: …….	Size: ……...	Age: ……
Inspection Date: …… Meter Condition: ……			
Reasons for Relocation/Removal (*tick appropriately*)			
……..			
…….....			
……...			

I, the undersigned hereby declare that the information given on this application is true and correct.

Name: …….. Designation: …… Signature: ……... Date: ……

Section 3: Authorization

Request: Granted: ……. Not Granted: ……
Remarks:

……..

……..

……..

Name: …… Signature: ……. Date: ……
COMMERCIAL MANAGER

Form T4: Meter Testing

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Voucher No:

Section 1: Customer Application

Customer Name:	Address:
A/C No.:	Email:
Telephone/Mobile:	Water meter Serial No:
Meter Reading:	Date of Reading: Time:
Please test my water meter. I agree to pay TZS ..... if you find my water meter is working properly. …… ……. Signature*(Customer)* Date	

Section 2: For Office use only

Request Received on Date: Time:	Job Number allocated:
Customer Care Officer Receiving:	Recommended by: ……. …… Signature *(Commercial Manager)* Date
Remarks from Technician after Testing:	 ……. …… Signature *(Technician)* Date
Recommendations from Technical Manager:	 ……. …… Signature *(Technical Manager)* Date
Feedback to Customer:	 ……. …… Signature *(Customer Care Officer)* Date

NOTE:

i. Meter Testing should be done in the presence of the customer or Authorized representative

ii. Appropriate Job Card to be filled

Form T6a: Leak Detection

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Section 1: Reporting

Visible Leak Reported By:	Customer: ……	Staff: ……..	Others: ……
Non Visible Leak Detected by:		Leak Detection Team: …….	Others: ……

Section 2: Action

Leak Reported	Date: ……	Time: ……..
Leak Located	Date: ……	Time: ……..
Leak Repaired	Date: ……	Time: ……..

Section 3: Details

Leak Location

Air Valve: …….....	Valve: ……	Hydrant: …….
Service Connection: ……	Main Pipe: ……	Other: ……..

Material

UPVC: …….....	Steel: ……...	HDPE: ……	Ductile Iron: ……..
Asbestos: …….....	Concrete: ……	Cast Iron: ……...	Others: ……

Depth of Leak: …… cm

Type of Leak

Longitudinal Crack: …….	Transverse Crack: …….	Corrosion Hole: ……
Leak from Joint: ……	Leak from Flange: …….	Other: ……..

Location Sketch

Form filled by:

……	……	……	……..
Name of Utility Staff	**Designation**	**Signature**	**Date**

Form T6b: Leakage Register

_____Water Supply and Sanitation Authority

Phone: _____
Fax: _____
E-Mail: _____
P.O. Box: _____
City: _____
United Republic of Tanzania

Form No.:

S. No.	Date	Leak Location	Leak Type	Leak Cause	Pipe Size + Material	Leak Duration	Reported by	Date of Repair	Name of Technician	Signature of Technician

Form T6c: Job Card

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

DATE:	
REQUESTED BY:	
INCIDENT:	

LOCATION:	JOB NO:
TYPE OF JOB*:	

*1. REPAIR; *2. REPLACEMENT; *3. MAINTENANCE; *4. METER INSTALLATION

JOB DESCRIPTION	MATERIALS REQUIRED	QTY	AMOUNT	STOCK STATUS	REMARKS

4. ESTIMATED JOB DURATION: …… 5. TOTAL MANPOWER ……..…… 6. TOTAL MAN HOUR ……..……..

7. OVERALL TOTAL COST ……..

NAME OF TEAM LEADER ***SIGNATURE:***	NAME OF THE SECTIONAL MANAGER ***SIGNATURE:***
NAME OF THE OVERALL SUPERVISOR ***SIGNATURE:***	JOB APPROVED BY ***SIGNATURE:***

Form T7: Customer Service Line Maintenance

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Section 1: To be filled by the Customer

Customer Name:		A/C No.:
Meter No.:	Zone:	Mobile:
Customer Request *(must be ready to pay the cost associated with maintenance)*		…….. Signature ……..... Date

Section 2: Request Analysis

Type of Maintenance Required	Cost for Maintenance: …….. Signature *Zone Technician* …… Date
Remarks/Authorization from Technical Manager	…….. Signature *Technical Manager* …… Date

Section 3: Action Plan

Invoice prepared on:	Issued to Customer On:	Amount:
Payment Date:	RRV No.:	Code:
Remarks/Works completed on:		…….. Signature *Zone Technician* …… Date
Handing Over to Customer		…….. Signature *Customer* …… Date

Form T8a: Illegal Connection

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Section 1: Details of Illegal Connection

Name of Suspect	Plot No.:	House No.:
A/C No. *(if applicable)*	Mobile/Telephone No.:	
Details of Water Theft		
I concur that, the above details are correct and true as far as illegal use of water is concerned.	……. Signature *(Suspect)*	…… Date
Gathered evidence and attachments are:		

Section 2: Official Use

Illegal Connection/Use registered on Date:	Time:	Location:
…… Name of Officer filling the form	…… Signature	……. Date

Form T8b: Compensation Claim

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Customer Name:		Meter No:	A/C No:
Location:	Zone:	Ward:	Customer Type:
Type of Tempering:			
Amount of Compensation *(Clearly show the calculations)*			
Basis for Calculation			
…….. Name of Authorised Officer	……. Signature	……. Date	
…….. Name of Commercial Manager	……. Signature	……. Date	
…….. Name of Responsible Customer	……. Signature	……. Date	

Form T9: Water Chemicals Laboratory Results

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Analysis requested by …….……..... Ref. No ……. Dated …….…....

Name of Supplier Submitting Samples ……..……..……

Samples dated collected for Analysis ……..…….. Date analysed ….....

Lab. No	Source	Sample	Appearance	Physical Characteristics	Chemical Characteristics	Comments
		Calcium Hypochlorite ($Ca(Ocl)_2$)				
		Aluminium Sulphate (Al_2SO_4)				
REMARKS:						

RECOMMENDATION……

……

……

……

…… **……** **……**

Date **Reporting Officer** **Laboratory Supervisor**

Form T10: Materials Acceptance

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Section 1: Preliminary

Objectives of the Inspection:		
Team Members		
S. No.	Name:	Designation
1		
2		
3		
4		
5		
6		
7		

Section 2: Materials Inspection

S. No.	Description	Unit	Quantity Ordered	Quantity Received	Remarks

Section 3: Decision by the Team

Observation of the Inspection:	Remarks:	
Team Members		
S. No.	**Name:**	**Signature** **Date**
1		
2		
3		
4		
5		
6		
7		

Form T11a: Pump House Register

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Pump No: ……..…… **Location: ……**

Date	Pumping Hours			Electric Power Readings (kWh)	Electric Power Readings (kVA)	Water Produced (m^3)	Ampere Meter Reading (A)	Voltmeter Reading (V)	Chlorine consumed (kg)	Remarks
	Pump Started	Pump Stopped	Pumping Hours							

Form T11b: Pump House Handover

_____Water Supply and Sanitation Authority

Phone: _____

Fax: _____

E-Mail: _____

P.O. Box: _____

City: _____

United Republic of Tanzania

Voucher No:

Name and Signature of outgoing Operator	Time of Shift	Statement on Pump-House Equipment Situation	Discharge	Head	Average/ Voltage	Temp.	Water Levels	Abnormal Occurrence: Type and Time, possible Cause, reported	Instructions and Name of Instructors, Time	Name and Signature of Incoming Operator

Form T12a: Physical and Chemical Water Quality Analysis

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Ref. No.:

(1) ORIGIN OF THE SAMPLE

Analysis requested by ……..…… Ref. No …….. Dated …….

Date received at the Laboratory ……..…….... Date collected for Analysis ……..….. Time ……

Temp ....…... °C Water Source ……..…..……. Region …… District ..... Ward ……..……..

Purpose of Sampling……....……. Sampling Position…….....……

Preservative added/Type of Treatment to Water before Sampling.....

(2) PHYSICAL EXAMINATION

Appearance …… Colour ..... mg Pt/L. Turbidity ……...…NTU. Odour .....

Settable matter. ……..... MI/L pH ...……..….. Temp ..... Conductivity at 25°C…..….....µS/

Total Dissolved Solids ….....mg/L Total Non_filtrable Residue at 105 °C ……...……

(3) CHEMICAL EXAMINATION (in Milligrams per litre)

Alkalinity (as $CaCO_3$).....	Hardness (as $CaCO_3$).....	Calcium……
Phenophthalein…….	Carbonate……...	Magnesium…….
Total……	Non Carbonate……..	Sodium…….
	Total……	Potassium……
Cadmium…….....	Total Nitrogen……....	Chloride……..
Chromium…….	Ammonical Nitrogen…….....	Fluoride……
Copper……	Organic Nitrogen……..	Permanganate Value……..
Iron……..	Nitrate Nitrogen……	(as mg KMnO /l)……
Lead……	Nitrite Nitrogen……	B.O.D. (5 days)……..…….….....
Manganese ……	Total phosphorus……..	Others……..…….
Mercury……..	Orthophosphate……	
Zinc…….	Sulphate……..	

(4) REMARKS

…….....

.....…….....

(5) RECOMMENDATION……..

……..

…… …….... ……

Date Reporting Officer Laboratory Supervisor

Form T12b: Bacteriological Water Analysis

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Ref. No.:

Analysis requested by …… Ref. No …….. Dated …….....

REGION ……..…… DISTRICT …….. WARD …… SOURCE …….…….……...

Dated collected for Analysis …….……..... Date analysed ….....

Sample collected by Laboratory Personnel …….. YES …….…….NO…….....

Lab. No	**Source**	**Site of Sampling**	**Total Coliform Bact 100ml (35^0C)**	**Faecal Coli/100ml (44.5^0C)**	**Residual Chlorine mg/L**	**Comments**
REMARKS						

RECOMMENDATION ……

……

…… **……** **……**

Date **Reporting Officer** **Laboratory Supervisor**

Form C1: Bills/Debts Adjustment

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Ref. No.:

Account No…… Meter No…… Voucher No.....

Customer Name…….. Zone…….

Location…… Billing Adjustment *(YES/NO)*… Debt Adjustment *(YES/NO)*…

Reasons for Adjustment: Effective Date: ……...

…….

…….

CALCULATION FOR ADJUSTMENT

SUMMARY

Account No.	Transaction Code	Water		Total
		Debit (+)	Credit (-)	
	Total			

Prepared By:……. Signature……. Date:…….

(ZONAL INCHARGE/CUSTOMERS SERVICE ATTENDANT)

Checked By:…….. Signature……. Date:…….

(COMMERCIAL MANAGER/CREDIT CONTROLLER)

Approved By:……. Signature……. Date:…….

(MANAGING DIRECTOR)

Adjustment made by:…… Signature……. Date:…….

(DATABASE/BILLING OFFICER)

NB: ATTACH SUPPORTING DOCUMENTS

Form C2a: Meter Reading Log Sheet

______________________________Water Supply and Sanitation Authority

Phone: ______________________ P.O. Box: ______________________

Fax: ______________________ City: ______________________

E-Mail: ______________________ United Republic of Tanzania

Ref. No.:

Zone:

Meter Reader ID:

Reading Date:

Remarks Codes:

0 No Readings Supplied	4 On Borehole	8 Disconnected
1 No Access/Gate closed	5 No Connection	9 Illegal Reconnection
2 No Water	6 Stuck Meter/Stopped Moving	10 Defective meter/ Dirty
3 Vacant Prop./Stopped Building	7 Working Meter	11 Reversing

Customer Name	Acc No	Street	Plot No	Meter No	Prev Rdg	New Rdg	Cons	Mtr Sts	Other Rmks

Form C2b: Bills Distribution

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Ref. No.:

ID	Name	Zone	Route	Total No of Accounts	Signature

Form C3a: Payment by Installment

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Ref. No.:

Customer Name:		A/C No:	Location:
Zone:	House No.:	Meter No:	Mobile:
Reasons for Paying in Installment *(Refer Utility Compensation guidelines)*			Amount:
Both parties agrees payment to be done in the following manner:		Date:	RRV No.:
1st Instalment			
2nd Instalment			
3rd Instalment			

……..	…….	…….
Name of Customer/Suspect	Signature	Date
……..	…….	…….
Name of Commercial Manager	Signature	Date
……..	…….	…….
Name of Managing Director	Signature	Date

Form C3b: Water Supply Disconnection

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Section 1: To be filled by Commercial Manager

Customer Name:	
A/C No.:	Meter No.:
Zone:	Ward/Street
RE: WATER SUPPLY DISCONNECTION NOTICE DUE TO NON PAYMENT OF WATER BILLS TODATE	
Amount:	Cost for Reconnection:
Total Debt:	
…….. Signature (Commercial Manager)	…….. Date

Section 2: Technical part

Name of Plumber/Technician:	
Proposed date for the disconnection of water service	Date:
Water service has been disconnected on	Date:
…….. Signature (Plumber/Technician)	…….. Date

Form C4a: Customer Meter Check

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Section 1: Preliminary

Customer Name:		A/C No:	Location:
Zone:	House No.:	Meter No:	Mobile:
Nature of Meter Defect *(To be filled by examining Technician)*			
Cause of Defect: *(To be filled by examining Technician)*			
……..		…….	……
Name of Technician		Signature	Date
……..		…….	……
Name of Supervisor		Signature	Date

Section 2:Decision

Comments : *(To be Filled by Commercial Manager)*		
…….....	……	……
Name of Commercial Manager	Signature	Date

Form C6: Water Supply Reconnection

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Section 1: To be filled by Commercial Manager

Customer Name:	
A/C No.:	Meter No.:
Zone:	Ward/Street
Amount paid:	Cost for Reconnection paid:
Total Payment done:	
…….. Signature (Commercial Manager)	…….. Date

Section 2: Technical part

Name of Plumber/Technician:	
Water service has been restored on	Date: Time:
…….. Signature (Customer)	…….. Date
…….. Signature (Plumber/Technician)	…….. Date

Section 3: Billing Section

Name of Billing Officer:	
Customer Details have been logged into register and in the computer billing system. ☐ YES ☐ NO	
…….. Signature (Billing Officer)	…….. Date

Form C8: Customer Care Register

______________________________Water Supply and Sanitation Authority

Phone: ________________________ P.O. Box: ________________________

Fax: ________________________ City: ________________________

E-Mail: ________________________ United Republic of Tanzania

Form No.:

S.No	Date	Type			Means				Description of Col3.	Action taken	By Who Signature	Date	Feedback to Customer
		Feedback	Enquiries	Complaint	Tel	Email	Direct	Letter					

Form C9: Updating Customer Details

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

Customer Name:		A/C.No.
Meter No:	Location:	Zone:
Data to be Changed		
Reasons for change *(please attach evidence)*		
……..	…….	…….
Name of Customer	Signature	Date
Remarks *(To be given by billing clerk)*		
……..	…….	…….
Name of Billing Clerk	Signature	Date
Approved/Rejected		
……..	…….	…….
Name of Commercial Manager	Signature	Date

Form G1a: Materials Requisition Form

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

SECTION/ZONE: ……. DEPARTMENT: …… JOB NO: …….

S.No.	SIZE PART NO	DESCRIPTION	UNIT	QUANTITY REQUIRED	QUANTITY AUTHORISED	STORES USE ONLY		
						VALUE		LF
						TSHS	CTS	

Give details of the use of the materials

……...

……...

……...

Name: …… Designation: ……..... Signature: …….. Date: ……
REQUESTING OFFICER

CERTIFYING OFFICERS

Name: …… Designation: ……..... Signature: …….. Date: ……
HEAD OF DEPARTMENT/SECTION/ZONE

Name: …… Designation: ……..... Signature: …….. Date: ……
SUPPLIES OFFICER

AUTHORISIZING OFFICER (UM/TM/CM)

Name: …… Designation: ……..... Signature: …….. Date: ……

Form G1b: Department Consumption Register

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

Form No.:

S.No.	Date	Description of Material	Quantity Consumed

These Materials are to be used for……..

…….

…….

……..

Name:……..... Signature:…… Date:…….

REQUISITIONING OFFICER

Name:……..... Signature:…… Date:…….

AUTHORISING OFFICER

Form G2: Handing Over

_____Water Supply and Sanitation Authority

Phone: _____ P.O. Box: _____

Fax: _____ City: _____

E-Mail: _____ United Republic of Tanzania

In reply please quote Ref. No.:

Section 1: Preliminary

Name of Handing Over Officer:……. Designation:……

Reason for Handover:……

……

……

Name of Handed Over Officer:…….. Designation:……

Section 2: Details

Handing over details……..

……

……

……

……

……

Handed Over items/docs……..

……

……

……

……

Attachments to Handing Over Form……

……

……

……

……

……

Section 3: Agreement

…… **……**

Signature of Handing Over Officer Signature of Handed Over Officer

Effective Date:……..

Imprint

Published by the
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

GIZ Water Programme
65 Ali Hassan Mwinyi Road
P.O. Box 1519
Dar es Salaam
T +255 (0) 222115930
F +255 (0) 222116504
giz-tanzania@giz.de
www.giz.de/en/worldwide/347.html

Publishing date
January 2014

Design and layout
MEDIA DESIGN - www.media-design.me

Photo credits
Theo Julius Goedderz

Text
William Gaudence Landa, Joseph Erasto Swai, Eng. Abbas P. Muslim, Eng. Alex J. Kaaya, Dr. Fred Simon Lerise

GIZ is responsible for the content of this publication.

On behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), Germany