

# NAIROBI WATER COMPANY.

## Billing and Revenue System

# 1. Water billing system

## 1.1 OBJECTIVES

The objectives of water billing are:

- To increase the revenue of the company.
- To keep track of customers records and transactions
- To better the management of records and proper billing of their clients.

## 1.2 INTRODUCTION

The water billing system is controlled and managed by the Information Technology department of Nairobi Water Company.

All the updates that are done in the head quarter; Nairobi Water Company at (Kampala Road) and later updated in the water supply using a lease line.

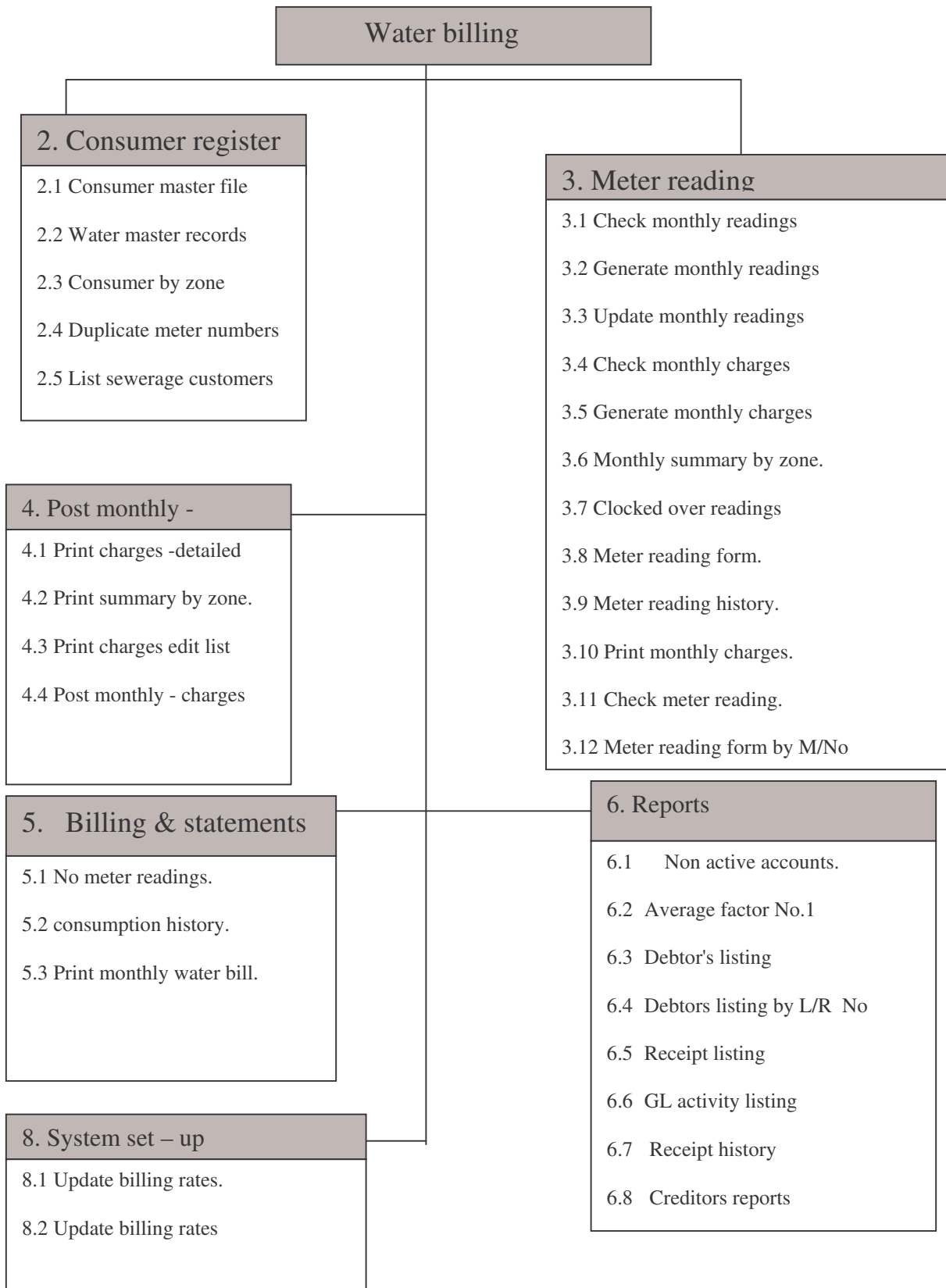
**Note that this manual is written with the knowledge that the end user knows how to operate a computer. It guides the user on how to use the system database.**

## 1.3 MENU AND INSTRUCTIONS

Once you login into the water database system, a menu box like this appears

Water system is a dynamic system that manages, controls the database and keeps track on all the transaction done in water system.

1.4 Structure chart



## 2. Consumer register

### 2.1 Consumer master file

This is the master file screen that is used to enter all the customer's information. This includes an account number, which is unique, name, type, town, address, meter number, last reading etc.

Note that if a customer gets disconnected or become non-active, this screen is used to update meter status to D- for disconnect, or C- for connected..

Action: Add Update Cancel Find Next Back Quit		
<b>TMC - WB Master File</b>		
x Account No: 01000254	Name: JOHN GITAU NJUGUNA	Type:D
x		
x PO Box : P.O.BOX 421	c/o:	
x Town : THIKA		
x		
x L/R No. : 4653/189	District : THIKA	
x Plot No.: 189	Section: SEC 9	
x		
x Meter Number: 012059		
x Type: L	Latest Reading :	
x Status: L	Date :	
x		
x Monthly Meter Rent: 10.00	Water Deposit :	
x Conservancy Charge: 100.00	Apply Sewer Charge? Y	
x Average Factor 1.00		

<b><i>Field</i></b>	<b><i>Description</i></b>
Account No.	- This is a unique number given to each client.
Name	- This is the name of the client.
Type	- This shows the type of usage of which water supplied is used for either residential or commercial
P.O Box	- This is the contact address of the client.
Town	- This refers to the town of the addressed post office.
L/R No.	- This shows the land registration number of the plot to which water is supplied
District	- Is the district in which the water is being supplied.
Plot No.	- Is the plot in which the water is being supplied to.
Section	- This is the section where the meter is located.
Meter No	- This is a unique meter number given to every consumer who has a meter.
Type	- This shows the unit type in gallons or litres
Latest reading	- This shows the last meter reading read.
Status	- This is the status of the water supply whether live,

		disconnected, repair or non-active.
Date	-	Is the date in which the meter was read.
Monthly meter rent	-	This is the cost of a meter, charged monthly
Conservancy	-	Fixed amount for water supply.
Water deposit	-	This is the money paid by a new client when applying for water supply.

## 2.2 Water master records

This lists all the information about the client. It's the output of the master screen.

MUNICIPAL COUNCIL OF THIKA  
List Water Billing Customer Master file

Account No.	P.O. Box	L/R No
00100001 STEPHEN M. NDUHA	P.O. BOX 1676THIKA	8
00100002 MR.S.P PUNJA	PO BOX 339 THIKA.	8362
00100003 MR.LEONARD K.GICHU	P.O.BOX 5 THIKA	0
00100004 MARY NDIRANGU.	PO BOX 4034 THIKA.	8703/3
00100006 CHANIA HIGH SCHOOL	P.O.BOX 45 THIKA	130/0
00100008 FELIX MURIITHI MBUI.	P.O. BOX 128 THIKA.	HG 29
00100009 GEORGE THUO	P.O. BOX 66838NAIROBI	LR 9701

**Field**                      **Description**

Account No.	-	This is a unique number given to each client. Residential or commercial
P.O Box	-	this is the contact address of the client.
L/R No.	-	this shows the land registration number of the plot to which water is supplied
Plot No.	-	Is the plot in which the water is being supplied. receives his water
Meter No	-	This is unique number that is given to each consumer who has a meter.

## 2.3 Consumer by zone

This lists all the clients supplied with water according to their zones (where the customers receive their water from or where they are allocated their water). This lists the account number, name of the client, the usage type, the client's address, the meter number, the status of the connection and the zone which is the primary key.

### Water Customer listing - by Zone ---

00100001 R STEPHEN M. NDUHA	P.O. BOX 1676 THIKA	MA
00100002 R MR.S.P PUNJA	PO BOX 339 THIKA.	MA
00100003 R MR.LEONARD K.GICHU	P.O.BOX 5 THIKA	MA
00100004 R MARY NDIRANGU.	PO BOX 4034 THIKA.	MA
00100006 R CHANIA HIGH SCHOOL	P.O.BOX 45 THIKA	W/
00100008 R FELIX MURIITHI MBUI.	P.O. BOX 128 THIKA.	UP
00100009 R GEORGE THUO	P.O. BOX 66838 NAIROBI	KI
00100010 R BEATRICE MANYONGE	P.O. BOX 128 THIKA.	UP

<b><u>Field</u></b>	<b><u>Description</u></b>
Account No.	- This is a unique number given to each client.
Name	- This is the name of the client.
Type	- This shows the type of usage of which water supplied is used for either residential or commercial
P.O Box	- This is the contact address of the client.
Town	- This refers to the town of the addressed post office.
L/R No.	- This shows the land registration number of the plot to which water is supplied.
Meter No	- This is a unique number given to every consumer who has a meter.
Type	- This is the unit of water used in either gallons or litres.
Status	- This is the status of the water supply whether live, disconnected, repair or non-active.

## 2.4 Duplicate meter numbers

This report shows duplicate water meter numbers for different consumer account numbers. Council not having a correct systematic way of giving meter numbers caused this.

Below is a sample report

MUNICIPAL COUNCIL OF THIKA				
----- Duplicate Water Meter Numbers -----				
Meter	Type	Status	Current	Consumer Account
1070770	L	N	00100062	R MR. GABRIEL L. MAINA
1070770	L	OK	01500146	R MRS LUCIA MUTUKU KURIA
33355166	L	N	00100069	R ORIENTAL CONSTRUCTION
33355166	L	OK	00600003	C M/S BLUE POST HOTEL
81001901	L	Disc	00100097	R VICTORIA NYAMA
81001901	L	Disc	00110097	R TABITHA M. KAMU
1036	L	OK	00100102	R VICTOR MAINA NGUNJIRI.
1036	L	OK	02200148	C STEPHEN M.KIMANI

## 2.5 List sewer customers

This report prints out sewerage customers.

Account No.	Name	PO.	Box	Town	C/O
00100101	M/S UMOJA FLOOR MILLS LTD.	PO	BOX 119	THIKA.	
00100102	VICTOR MAINA NGUNJIRI.	PO	BOX 6054	THIKA.	
00100105	FREDRICK N.MUIRURI P.O.	BOX	899	THIKA	
00100106	M/S KIGIO GROUP CO.LTD.	PO	BOX 1387	THIKA.	
00100108	JAMES JOSEPH THUKUP.O.	BOX	158	THIKA	
00100111	HINDI MAHILA MANDAL	P.O.	BOX 1493	THIKA	
00100112	M/S BAHATI BATA SHOP	P.O.	BOX 1325	THIKA	
00100114	SAFEWAYS HYPERMARKE LTD.	PO	BOX 55070	NAIROBI.	
00100118	FELISTAS NJERI P.O.	BOX	2729	THIKA.	
00100119	MR. A. S. BHAMRA	P.O.	BOX 180	THIKA	

<b><i>Field</i></b>	<b><i>Description</i></b>
Account No.	- This is a unique number given to each client.
Name	- This is the name of the client.
Type	- This shows the type of usage of which water supplied is used for either residential or commercial
P.O Box	- This is the contact address of the client.
Town	- This refers to the town of the addressed post office.
L/R No.	- This shows the land registration number of the plot to which water is supplied
Meter No	- This is a unique number given to every consumer who has a meter.

### 3. Meter reading

#### 3.1 Check monthly readings

This report will check the monthly readings before they can be generated.  
 If the data is not correct this report will show you so that you can correct before generating.  
 This report will list the zone and the bill month that you want to generate.

MUNICIPAL COUNCIL OF THIKA

----- Next Meter Reading Sheets - 2003-10 -----

001 Bill Month : 2003-10

Account no		Meter no	L/R no.	Plot no.
0001	STEPHEN M. NDUHA	3357374	8361	0236
0002	MR.S.P PUNJA	648975	8362	3210
0003	MR.LEONARD K.GICHU	697281	0	980
0004	MARY NDIRANGU.	12483	8703/3	8703/3
0006	CHANIA HIGH SCHOOL	8100404	SCH.COMP	120/3
0008	FELIX MURIITHI MBUI.	994	HG 29	HG 29
0009	GEORGE THUO	79650010	LR 9701	120
0010	BEATRICE MANYONGE	82184681	021/1	p45
0011	GRACE M. MOGOI	6230	HG 10	5460
0014	DR. J. F. C. MUNENE	3356410	4998	36C
0015	A.C.K. MEMORIA .	7440062	CHURCH	CHURCH

#### 3.2 Generate monthly readings

After you have run the edit monthly readings report and no errors reported you can now run this report to generate monthly readings and post them into charge table.  
 The generation is done once per monthly it also allows you to generate a particular account if charges are done after monthly posting i.e. if a certain account has changed from disconnected to live.

MUNICIPAL COUNCIL OF THIKA

----- Next Meter Reading Sheets - 2003-10 -----

001 Bill Month : 2003-10

Account no		Meter no	L/R no.	Plot no.
0001	STEPHEN M. NDUHA	3357374	8361	0236
0002	MR.S.P PUNJA	648975	8362	3210
0003	MR.LEONARD K.GICHU	697281	0	980
0004	MARY NDIRANGU.	12483	8703/3	8703/3
0006	CHANIA HIGH SCHOOL	8100404	SCH.COMP	120/3
0008	FELIX MURIITHI MBUI.	994	HG 29	HG 29
0009	GEORGE THUO	79650010	LR 9701	120
0010	BEATRICE MANYONGE	82184681	021/1	p45
0011	GRACE M. MOGOI	6230	HG 10	5460
0014	DR. J. F. C. MUNENE	3356410	4998	36C
0015	A.C.K. MEMORIA .	7440062	CHURCH	CHURCH

### 3.3 Update monthly readings

This screen is used to update monthly readings. It includes zone, bill month, last meter reading, read type, current readings, date, account number etc.  
 The screen will allow you to update multiple accounts for a certain zone during that bill month.

Action: Update Find Next Back Quit					
----- TMC - Monthly Meter Reading -----					
Zone: 001	Bill Month: 2003-09	No. of Records	633		
Last Meter Reading:		Read Type			
Account No.--Clockover	----	Reading	-----	Date	---- Status - Meter Type
00100001	N	3614.00	30/09/2003	L	A
00100002	N	5252.00	30/09/2003	L	A
00100003	N	6281.00	30/09/2003	L	A
00100004	N	6484.00	30/09/2003	L	A
00100006	N			N	
00100008	N	8613.00	30/09/2003	L	A
00100009	N	666.00	30/09/2003	L	A
00100010	N	9256.00	30/09/2003	L	A
00100011	N	8206.00	30/09/2003	L	A
00100014	N	9185.00	30/09/2003	L	A
00100015	N	1103.00	30/09/2003	L	A

<i>fields</i>	<i>description</i>
zone	- A unique code that identifies each zone
bill month	- This is the billing month.
Last meter reading	- This field shows the last reading.
Account no	- Is unique number that is given to every client.
Reading	- Shows the current reading.
Date	- This is the date when readings are been entered.
Status	- This shows whether the account is active or non-active.

### 3.4 Check monthly charges

Before posting is done this report is used to check errors and charges. If errors occur you should correct first before you proceed with posting.

### 3.5 Generate monthly charges

Once the checklist is done and no errors were detected and charges were correct, now use this report to post to charge tables.

### 3.6 Monthly summary by zone

This report shows the monthly summary which includes litres used, water charge, sewer charge, meter rent, conservancy, total amount etc by zone.

MUNICIPAL COUNCIL OF THIKA

----- Monthly Water Billing Charges Summary: 2003-09 -----

Zone Charged	Litres Used	Water Charge	Sewer Charge	Meter-Rent	Conservancy	Total Amount	Total Receipt
001 619	8,502,000	124,919.00	36,239.50	6,230.00	76,970.00	244,358.50	285,355.70 116.78%
002 281	4,529,000	66,384.00	26,757.50	2,810.00	29,908.60	125,860.10	95,348.00 75.76%
003 565	9,330,000	151,262.00	64,765.50	5,790.00	66,970.00	288,787.50	260,662.45 90.26%
004 804	7,576,000	183,047.00	76,828.00	8,330.00	136,795.00	405,000.00	401,915.50 99.24%
005 334	2,689,000	61,738.00	30,819.00	3,470.00	47,720.00	143,747.00	199,650.85 138.89%
014 256	7,735,000	106,010.00	52,612.00	2,560.00	25,850.00	187,032.00	306,642.05 163.95%
029 7	199,000	3,317.00	0.00	70.00	1,650.00	5,037.00	4,230.00 83.98%
030 2	15,000	160.00	0.00	20.00	200.00	380.00	0.00 0.00%
<b>TOTAL</b>	<b>9,056</b>	<b>255,075,000</b>	<b>6,910,876.00</b>	<b>2,077,447.50</b>	<b>98,971.00</b>	<b>1,263,694.60</b>	<b>10,350,989.10 8,670,726.30 83.77%</b>

<i>Field</i>	<i>description</i>
Zone	- This is a unique number referring to each zone.
Litres used	- This is the litres of water used by the client during that month.
Water charge	- This is the amount of money charged for the amount of water used.
Sewer charge	- This is the sewer charge for those with sewer or bow holes.
Meter rent	- This is a standard charge charged to each customer provided with water by the council.
Conservancy	- This is a fixed charge paid by or the consumers whether the water was used or not.
Total amount	- This is the total amount of all the charges above.
Total receipt	- This is the amount on the receipt paid.

### 3.7 Clocked over readings

When meter readings goes back to zero it clocks over.  
 For example some meters will read up to 999990 on month of January then the following month will read 0000100 at this point you will say the meter has clocked over and the month of February readings will be 110.

### 3.8 Meter reading form

This output is given to people in fieldwork to key in meter readings each month. It's ordered by zone to make the work easier for people in the field.

MUNICIPAL COUNCIL OF THIKA

----- Meter Reading Form -----

Account	Name	Reading	Meter No.	House No.
00100001	STEPHEN M. NDUHA	_____	3357374	_____
00100002	MR.S.P PUNJA	_____	648975	_____
00100003	MR.LEONARD K.GICHU	_____	697281	_____
00100004	MARY NDIRANGU.	_____	12483	_____
00100006	CHANIA HIGH SCHOOL	_____	8100404	_____
00100008	FELIX MURIITHI MBUI.	_____	994	_____
00100009	GEORGE THUO	_____	79650010	_____

<i>field</i>	<i>description</i>
account No.	- This is a unique number given to each client.
Name	- This is the name of the customer.
Reading	- This is the reading on the meter.
Meter No.	- This is the unique number for each meter.
House No.	- This is the number of the house supplied with water.

### 3.9 Meter reading history

This gives a report on a certain account over a specified duration. and it shows the date the meter was read, the reading and the status of the client.

MUNICIPAL COUNCIL OF THIKA

----- Water Meter Reading Report -----

	Read Date	Reading	Status
00300336 MICHAEL NGIGI GICHIA	30/01/2003	5809	Connected
	28/02/2003	5825	Connected
	28/03/2003	5825	Connected
	30/04/2003	5872	Connected
	30/05/2003	5892	Connected

<i>Field</i>	<i>description</i>
Read Date	- This is the date the meter was read.
Reading	- This shows the reading that was read on the stated date.
Status	- This is the status of the client when the meter was being read.

### 3.10 Print monthly charges.

Report shows the meter reading and the charges for each account depending on the number of units used.

MUNICIPAL COUNCIL OF THIKA

----- Water Bill Detail Listing - 2003-09 -----

Consumer	Units	Wtr Charge	Sewer	Rent	Conservancy	Status
00500001 MILLY'S PO	1251	79.00	2,760.00	1,380.00	10.00	150.00 A L
00500002 M/S STD.	4934	40.00	1,200.00	600.00	10.00	150.00 A L
00500003 NJOKA & KA	8655	15.00	350.00	175.00	10.00	100.00 A L
00500004 M/S NJOKA	4049	10.00	200.00	100.00	10.00	150.00 A L
00500005 f. GITHINJI	5881	13.00	290.00	145.00	10.00	260.00 A L
00500006 GATEKE GENE	2256	3.00	100.00	50.00	10.00	150.00 A L
00500007 MR. KIRAGU	5181	11.00	230.00	115.00	10.00	150.00 A L
00500008 M/S DEVSHI	1312	16.00	380.00	190.00	10.00	150.00 A L

<i>field</i>	<i>description</i>
units	- These are the units of water used.
Water charge	- This is the amount charged for using a certain units of water.
Sewer charge	- This is the sewer charge for those with sewer or bow holes.
Meter rent	- Standard charge charged to each customer provided with water by the council.
Conservancy	- Fixed charge paid by or the consumers whether the water was used or not.
Status	- This shows whether the account is live, disconnected or non-active.

### 3.11 Check meter reading.

This gives report on each account on the previous and the current reading.

#### MUNICIPAL COUNCIL OF THIKA

#### ----- Check Meter Reading Report -----

Bill Month 2003-06

		Prev Reading	Meter Reading	Status
00100305	DR.MUTURI MUIKIA	3924	3942	L
00100310	ISAAC G. GIKONYO	4398	4337	L
00100315	ESTHER N KIMOKOJI	6871	6732	L
00100329	MR. JOHN G. GATEKE	2660	2663	L
00100343	WINFRED NJERI KABURU	784	794	L
00100408	BERNARD N.NJONJO	3729	3748	L
00100432	ALICE M.MAGIRI	6860	6880	L
00100483	MICHAEL NJOROGE	320	331	L
00100550	HARRISON K. KANYI.	465	468	L

<i>Field</i>	<i>description</i>
Prev Reading	this shows the previous reading.
Meter reading	this shows the current meter reading.
Status	is the status of the account currently.

### 3.12 Meter reading form by M/No

This form is used to fill in meter readings by the staff who go to the field to take readings and is ordered by meter no.

#### MUNICIPAL COUNCIL OF THIKA

#### ----- Meter Reading Form -----

Account	Name	Reading	Meter No.	House No.
00600278	JOYCE WANJIRU N.	_____	0000	_____
00600055	EQUATOR HIGH SCHOOL	_____	0000	_____
00600011	M/S BULLEYS TANNERIES LTD.	_____	0000	_____
00600246	KIFARU TEXTILE MILLS	_____	00000	_____
00600008	CARNAUDMETALBOX (K) LTD	_____	00023600	_____
00600005	MEDICAL OFFICER OF HEALTH	_____	00046	_____
00600225	THIKA S.D.A. CHURCH.	_____	00120312	_____
00600286	HEIGHTS ACADEMY	_____	00150966	_____
00600279	KENYATTA SECONDARY.	_____	001700585	_____
00600275	SIMON M. KARANGU	_____	00170590	_____

### 4. Post monthly charges

#### 4.1 Print charges –detailed

This report will print out detailed water charges that include units, water charge, sewer, rent, conservancy and status.

MUNICIPAL COUNCIL OF THIKA

----- Water Bill Detail Listing - 2003-09 -----

Consumer		Units	Wtr Charge	Sewer	Rent	Conservancy	Status
00500001 MILLY'S PO	1251	79.00	2,760.00	1,380.00	10.00	150.00	A L
00500002 M/S STD .	4934	40.00	1,200.00	600.00	10.00	150.00	A L
00500003 NJOKA & KA	8655	15.00	350.00	175.00	10.00	100.00	A L
00500004 M/S NJOKA	4049	10.00	200.00	100.00	10.00	150.00	A L
00500005 f. GITHINJI	5881	13.00	290.00	145.00	10.00	260.00	A L
00500006 GATEKE GENE	2256	3.00	100.00	50.00	10.00	150.00	A L
00500007 MR. KIRAGU	5181	11.00	230.00	115.00	10.00	150.00	A L
00500008 M/S DEVSHI	1312	16.00	380.00	190.00	10.00	150.00	A L

<u>field</u>	<u>description</u>
units	- these are the units of water used.
Water charge	- this is the amount charged for using a certain units of water.
Sewer charge	- this is the sewer charge for those with sewer or bow holes.
Meter rent	- this is a standard charge charged to each customer provided with water by the council.
Conservancy	- this is a fixed charge paid by or the consumers whether the water was used or not.
Status	- this shows whether the account is live or not.

#### 4.2 Print summary by zone

This is a summary report of water charges by zone; it includes units, water charge, sewer, rent, conservancy and status.

MUNICIPAL COUNCIL OF THIKA

----- Water Bill Summary by Zone - 2003-09 -----

Consumer		Units	Wtr Charge	Sewer	Rent	Conservancy	Status
00500001 MILLY'S PO	1251	79.00	2,760.00	1,380.00	10.00	150.00	A L
00500002 M/S STD.	4934	40.00	1,200.00	600.00	10.00	150.00	A L
00500003 NJOKA & KA	8655	15.00	350.00	175.00	10.00	100.00	A L
00500004 M/S NJOKA	4049	10.00	200.00	100.00	10.00	150.00	A L
00500005 f. GITHINJI	5881	13.00	290.00	145.00	10.00	260.00	A L
00500006 GATEKE GENE	2256	3.00	100.00	50.00	10.00	150.00	A L
00500007 MR. KIRAGU	5181	11.00	230.00	115.00	10.00	150.00	A L

4.3 Print charges edit list

This is an edit list for water charges that checks errors or whether the charges are correct. Once you are sure that charges are correct or no errors you can now use the post charge report to post them to the relevant tables.

Below is a sample report

MUNICIPAL COUNCIL OF THIKA						
----- Water Billing Edit List - 2001-06 -----						
02500030	DORIS WANJIRU	0.00	0.00	7.00	100.00	107.00
02500039	MARIAM NJOKI MUIRURI	0.00	0.00	7.00	100.00	107.00
02500044	TABITHA NJERI.	0.00	0.00	7.00	100.00	107.00
02500053	ONESMUS M.NGANGA	0.00	0.00	7.00	100.00	107.00
02600011	S.K. KARABA.	0.00	0.00	7.00	100.00	107.00
02700265	ROSE WAMBUI KAMATU	0.00	0.00	7.00	100.00	107.00
02700287	JOSEPH KURIA KIMANI	0.00	0.00	7.00	100.00	107.00
02700305	CHARLES MURU MUIRURI	0.00	0.00	7.00	100.00	107.00
02700307	JAMES MWANGI MBUGUA	0.00	0.00	7.00	100.00	107.00
	Monthly Total:			179,715.00		
	Total:			179,715.00		

21/10/2003 10:13

MUNICIPAL COUNCIL OF THIKA

----- Summary Report -----

	Debit Amount	Credit Amount
Period: 2001-0		
000 HEAD OFFICE 14200 WATER-BILLING DEBTOR	179,715.00	0.00
03109 WATER BILLING. - REVENUE62140 WATER METER RENT	0.00	8,162.00
04055 PUBLIC HEALTH - ADMINISTRATION62130 CONSERVANCY CHARGES	0.00	171,553.00
Period Summary:	179,715.00	179,715.00
Summary Total:	179,715.00	179,715.00

4.4 Post monthly charges

This report will post monthly water charges to the relevant tables after running edit list and confirming that no errors or charges are correct. Once the posting is done you cannot undo that.

Below is a sample report

**Note** that it's just like edit list report sample.

MUNICIPAL COUNCIL OF THIKA						
----- Water Billing Edit List - 2001-06 -----						
02500030	DORIS WANJIRU	0.00	0.00	7.00	100.00	107.00
02500039	MARIAM NJOKI MUIRURI	0.00	0.00	7.00	100.00	107.00
02500044	TABITHA NJERI.	0.00	0.00	7.00	100.00	107.00
02500053	ONESMUS M.NGANGA	0.00	0.00	7.00	100.00	107.00
02600011	S.K. KARABA.	0.00	0.00	7.00	100.00	107.00
02700265	ROSE WAMBUI KAMATU	0.00	0.00	7.00	100.00	107.00
02700287	JOSEPH KURIA KIMANI	0.00	0.00	7.00	100.00	107.00
02700305	CHARLES MURU MUIRURI	0.00	0.00	7.00	100.00	107.00
02700307	JAMES MWANGI MBUGUA	0.00	0.00	7.00	100.00	107.00
	Monthly Total:		179,715.00			
	Total:		179,715.00			

21/10/2003 10:13

MUNICIPAL COUNCIL OF THIKA

----- Summary Report -----

	Debit Amount	Credit Amount
Period: 2001-0		
000 HEAD OFFICE 14200 WATER-BILLING DEBTOR	179,715.00	0.00
03109 WATER BILLING. - REVENUE62140 WATER METER RENT	0.00	8,162.00
04055 PUBLIC HEALTH - ADMINISTRATION62130 CONSERVANCY CHARGES	0.00	171,553.00
Period Summary:	179,715.00	179,715.00
Summary Total:	179,715.00	179,715.00

5. Billing & statements

5.1 Average meter readings.

Report shows all those accounts that were charged without meter readings.

5.2 Consumption history.

This report will print out the customer’s consumption history since the account was opened up to date. It will include bill month, readings consumption, water, sewer, rent, conservancy and also the name and the account no.

MUNICIPAL COUNCIL OF THIKA						
----- Water Billing Consumption History -----						
01400249	ST.MATIA MULUMBA HOSPITAL.					
Bill Month	Reading	Consumption	Water	Sewer	Rent	Conservancy
1999-12	0	0.00	18,999.00	0.00	0.00	0.00
2000-01	11,722	747.00	15,804.00	7,902.00	27.00	450.00
2000-02	12,021	299.00	6,368.00	3,184.00	9.00	150.00
2000-05	12,876	855.00	18,180.00	9,090.00	27.00	450.00
2000-06	13,337	461.00	9,932.00	4,966.00	9.00	150.00
2000-10	14,596	1,259.00	25,178.40	12,589.20	36.00	600.00
2000-12	15,155	559.00	12,088.00	6,044.00	18.00	300.00
2001-01	15,699	544.00	11,068.00	5,534.00	18.00	300.00
2001-03	16,062	363.00	7,536.00	3,768.00	9.00	150.00
2001-04	16,401	339.00	7,008.00	3,504.00	9.00	150.00
2001-05	16,720	319.00	6,568.00	3,284.00	9.00	150.00
2001-06	17,039	319.00	6,568.00	3,284.00	9.00	150.00
2001-07	17,375	336.00	6,942.00	3,471.00	9.00	150.00
2001-08	17,890	515.00	10,880.00	5,440.00	9.00	150.00
2001-09	17,920	345.00	7,140.00	3,570.00	9.00	150.00
2001-10	18,265	345.00	7,140.00	3,570.00	9.00	150.00
2001-11	18,610	345.00	7,140.00	3,570.00	9.00	150.00
2001-12	18,890	315.00	6,480.00	3,240.00	9.00	150.00
2002-01	19,234	344.00	7,118.00	3,559.00	9.00	150.00
2002-02	19,578	344.00	7,118.00	3,559.00	9.00	150.00

- Bill month - Water charges are done monthly and bills issued out monthly, that month is called bill month
- Water charge - This is the amount charged for using a certain units of water.
- Sewer charge - This is the sewer charge for those with sewer or bow holes.
- Meter rent - This is a standard charge charged to each customer provided with water by the council.
- Conservancy - This is a fixed charge paid by or the consumers whether the water was used or not.

**5.3 Print monthly water bill.**

This output will show monthly water bills of all the account that are in water system. It will include bill month, readings consumption, water, sewer, rent, conservancy and includes receipts that has been paid so far.

This is the bill that is issued to the customer showing their balances.

M/S THIKA SPORTS CLUB	2003 - September
	00600001
P.O. BOX 257	BENDOR RD.
THIKA. 240	

INCLUDES RECEIPTS UP TO 30/09/2003

258542	2003 - September	10709	11049	340
--------	------------------	-------	-------	-----

54,095.00
13,200.00
0.00
45.00
3,150.00

Payment received	
10/09/2003 1162776	(20,445.00)

BALANCE DUE:	50,045.00
--------------	-----------

## 6. Reports

Reports are the outputs printed out from your database. You can print out listings, summaries, detailed reports, postings etc.

### 6.1 Non-active accounts.

Report will show all the non-active water billings accounts, meter number and when it was last billed

MUNICIPAL COUNCIL OF THIKA  
----- List Non Active Water Billing Accounts - Wed Dec 10 2003 -----

Account No.	Name	Meter No.	
00100006 THIKA	CHANIA HIGH SCHOOL W/SHOP RD SCH.COMP	8100404	Non Active Account Last Billed - 2002-07
00100053 THIKA	MR. NJOROGE NJIHIA SECTION 5	1306	Non Active Account Last Billed - 2003-03
00100062 THIKA	MR. GABRIEL L. MAINA H.S. RD.	1070770	Non Active Account Last Billed - 2003-03
00100069 NAIROBI	ORIENTAL CONSTRUCTION WATER SUPP 0	33355166	Non Active Account Last Billed - 2003-03
00100073 THIKA	MR. PASCAL MWANGI KINYU H. S. RD.	8100479	Non Active Account Last Billed - 2003-03

### 6.2 Debtors listing

This report will print out all the consumers who owe the council some amount of money. It also gives the total amount for all the listed accounts. It lists according to the account numbers and sort's amount from the highest debtor.

MUNICIPAL COUNCIL OF THIKA  
----- Water Billing Debtors Listing -----

00100357	FAMILY PLANNING ASS.	168	72,593.00
00100356	ARVINO D. PATEL	8362/9	32,826.50
00100353	MR. SAMUEL MWANGI KIBE	0	10,409.70
00100351	LUCAS GIKONYO KURIA	0	5,122.40
00100358	MR. BEN H. LUSIJI		2,635.00
00100359	Ms ROSEMARY N.GATHIGI		1,565.65
Total Amount owing			125,152.25

6.3 Debtors listing by L/R No

This report will print out all the consumers who owe the council some amount of money. It also gives the total amount for all the listed accounts. It lists according to the account numbers. But unlike debtors listing this will sort out by L/R No.

22/10/2003 17:02

MUNICIPAL COUNCIL OF THIKA

----- Water Billing Debtors Listing by L/R No. -----

A/C No: - A/C Name	L/R No: - Meter No: - Section	Outstanding Debt
00200255 MR.SAID HAMISI	10 82149 MAJENGO	1,628.50
00200104 MR. GITAHI MUKABI	10 A 715 MAJENGO	1,161.75
00200071 MARTIN KARERA	11 985 MAJENGO	60,588.50
00200047 MUHWANGA MICHUKI	11 82138029 MAJENGO	1,521.50
00200239 BENSON K.MUNDIA	11 819702 MAJENGO	15,041.00
00200055 SIMON KAMERO	11 42129908 MAJENGO	1,856.70
00200070 AGNES WAITHIRA.	11 6688 MAJENGO	6,145.00
00200148 MUTHONI NGANGA	11 12990 MAJENGO	876.50
00200026 REUBEN NDUATI THUO	11 333514 MAJENGO	3,552.50

6.4 Receipt listing

This output will list all the receipt paid for a particular period and it includes date paid, user who received the money, account no and a unique receipt number.

MUNICIPAL COUNCIL OF THIKA

----- Receipts Listing - Water Department -----

01186677	14/11/2003	MARTIN	083	TURN ON FEES	150.00	pndungu
01186678	14/11/2003	01300022 MBUGUA KIMANI	01	WATER RECEIPTS	1,840.00	ggjustus
01186679	14/11/2003	01500024 MR. STANLEY P.M.	01	WATER RECEIPTS	386.00	pndungu
01186682	14/11/2003	02100358 PETER M. NJOROGE.	01	WATER RECEIPTS	1,427.00	pndungu
01186682	14/11/2003	PETER	083	TURN ON FEES	150.00	pndungu
01186685	14/11/2003	02200198 JOHN CHEGE KIBE.	083	TURN ON FEES	150.00	ggjustus
01186685	14/11/2003	02200198 JOHN CHEGE KIBE.	01	WATER RECEIPTS	2,150.00	ggjustus
01186691	14/11/2003	01400035 NJIHIA MBUGUA	01	WATER RECEIPTS	505.00	pndungu
01186692	14/11/2003	00700171 MR. DAVID KANYI	01	WATER RECEIPTS	1,110.00	ggjustus
01186693	14/11/2003	01500167 JOHN NGUGI	01	WATER RECEIPTS	500.00	pndungu

6.5 GL activity listing

This report will print out all the general ledger activities for a particular client showing all the payment done, balances and the charges. At the end of the report it will show the total receipt and balances either credit or debit

Note that a receipt no and the date paid is shown and if a customer is given this report has to pay a certain amount of money.

MUNICIPAL COUNCIL OF THIKA

----- Account Statement - 00600020 MUUS KENYA LTD -----

Date		Debit	Credit	Balance
01/01/1998	Balance brought forward			0.00
23/12/1999	0131915 Receipt - 1999-12		(7,278.00)	(7,278.00)
31/12/1999	Balance from 1999 - Dec 1999	107,128.25		99,850.25
31/01/2000	0136051 Receipt - Jan 2000		(99,840.30)	9.95
31/01/2000	Water Billing - Jan 2000	39,579.00		39,588.95
29/02/2000	Water Billing - Feb 2000	13,347.00		52,935.95
24/03/2000	0141248 Receipt - Mar 2000		(47,988.00)	4,947.95
31/05/2003	Water Billing - May 2003	25,200.00		76,259.95
30/06/2003	Water Billing - Jun 2003	26,820.00		103,079.95
08/07/2003	0434701 Receipt - Jul 2003		(51,060.00)	52,019.95
31/07/2003	Water Billing - Jul 2003	24,360.00		76,379.95
08/08/2003	1155409 Receipt - Aug 2003		(25,200.00)	51,179.95
31/08/2003	Water Billing - Aug 2003	23,820.00		74,999.95
19/09/2003	1164837 Receipt - Sep 2003		(51,180.00)	23,819.95
07/10/2003	1169153 Receipt - Oct 2003		(23,820.00)	(0.05)
	Receipt Total:	(941,206.30)		
	Customer Balance:	(0.05)		

### 6.6 Receipt history

This report shows receipt history of the client that has been paid since the system was implement, this include that amount paid, receipt no, date and cashier login name.

MUNICIPAL COUNCIL OF THIKA

----- Customer Receipts Listing - Water Department -----

7/05/2002	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	1,500.00	jkgitau	132636
1065415	06/06/2002	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	500.00	jkgitau 137293
1076997	06/08/2002	01400072	MR.MARUNDA THUO.	01	WATER RECEIPT	1,500.00	jkgitau 148722
1083380	05/09/2002	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	1,500.00	ggjustus 155183
1088541	03/10/2002	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	1,500.00	ggjustus 159740
1094514	04/11/2002	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	1,500.00	nwambugu 200356
1136175	05/05/2003	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	1,200.00	jkgitau 205923
1144124	17/06/2003	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	365.00	jkgitau 213795
1154682	06/08/2003	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	1,050.00	jkgitau 225999
1160891	03/09/2003	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	1,100.00	ggjustus 231784
1168424	06/10/2003	01400072	MR.MARUNDA THUO.	01	WATER RECEIPTS	2,130.00	jkgitau 239402
Receipt Total:					45,272.00		

### 6.7 Creditors reports

This report will print out all the consumers whom the council owes some amount of money. It also gives the total amount for all the listed accounts. It lists according to the account numbers and sort amount from the highest creditor.

MUNICIPAL COUNCIL OF THIKA

Water Billing Creditor Listing

00100350	M/S FAMILY PLANNING ASS	TEMPORARY		(10,060.00)
00100369	EMMAH W.MUKORA	8362/4	8362/4	(1,446.00)
00100344	KARANGI COTT. LTD	8083		(941.00)
00100302	MR. PATRICK WACHIRA	4953/42		(330.00)
00100310	ISAAC G. GIKONYO	3		(302.00)
00100392	MESHACK GATHERU	2955/62		(100.00)
00100308	JAMES WAINAINA WAITHAKA	3		(48.75)
00100360	SALVATION ARMY	4953/594		(6.00)
00100375	M/S SALVATION ARMY	0		(2.50)
Total Amount owed				(13,236.25)

## 7. System set – up

### 7.1 Update billing rates.

In the system there are four different types of charges that the council has fixed on water charges and sewer charges and also the percentage of sewerage.

The charges defers from the consumer type i.e.

B – for breweries

C - for commercial

R – residential

S – sewer only

Note that this consumer type is given a unique code for identification.

Action: Add Update Find Next Back Quit

----- TMC - Water Billing Rates -----

Consumer Type: B - breweries

Min. Monthly Water Charge : 100.00 /=

Min. Monthly Sewerage Charge : 50.00 /=

Sewerage Surcharge (percent) : 64.00 %

..Code	.Lower....	..Upper.	...Rate(Ksh/1000L).....
01	0	10	20.0
02	10	20	30.0
03	20	40	35.0
04	40	100	40.0
05	100	200	50.0
06	200		60.0

<u>fields</u>	<u>description</u>
code	- This code uniquely identifies each consumer type.
Lower	- This is the lowest unit charged for that particular consumer type. -
Upper	- This is highest unit charge for that particular consumer type. -
Rates	- This are rate charges per litre.

### 8.2 update Billing parameters.

This screen is used to update billing parameters.

The accounts code and departments given below uniquely identifies those fields.

Action: Add Update Delete Cancel Find Next Back Quit

----- TMC - Water Billing Account Codes -----

Litre Per Gallon: 4.55  
Gallon Per Cubic: 220.00  
Ar Acct: 14200  
Ar Dept: 000

Water Acct : 62110  
Water Dept : 03109

Conservancy Acct: 62130  
Conservancy Dept: 04055

Meter Rent Acct: 62140  
Meter Rent Dept: 03109

Sewer Acct : 62120  
Sewer Dept : 03109