

ETHEKWINI WATER SERVICES

**FACILITATOR TRAINING MANUAL
FOR THE BASIC LEVEL WATER
AND SANITATION PROGRAMME**

FACILITATOR'S VERSION

NAME

Date of Facilitation :

PROJECT INFORMATION

What is this all about?

This is a project to provide water and sanitation to rural communities. A water supply and a toilet will be provided to each household.

What is this going to cost the householder?

Apart from the connection fee, there is no charge for the basic minimum (200 litres per household per day) level of water and sanitation

Pg 2



Who is paying for the project?

The project is being implemented by the eThekweni Municipality, using grant fund money, and the project will run from To The councillor and community leaders have agreed to the project.



Who will represent the community?

A project steering committee (PSC) has been selected and they will represent the community. Should the community have problems then they can discuss their problems with the PSC or their councillor or the community leaders



PROJECT STEERING COMMITTEE

What if I, as the householder, want more water per month?

This project provides 200 litres free water per day. This fills up in the ground tank through a system (called an automatic baillif) which is automatically controlled, and it is therefore not possible to organise more than 200 litres if you are being provided through this system.

If unlimited supply of water is required by you (the householder) and can be provided in your area, you will have to pay for the connections and you will not be part of this water and sanitation programme. You will be required to wait until such time as the Municipality's programme for bulk water supplies to your area. This may take 3 to 5 years. You will also have to pay for the amount of water used.

BASIC WATER SUPPLY



FULL PRESSURE WATER (not part of Water and Sanitation Project).



What if I want waterborne sanitation?

You will have to pay for it yourself in terms of the structure you would have to build and in addition to this you would have to pay for the connection from the water borne sanitation line and your house. You will also be taken out of the water and sanitation programme and will have to wait until the Municipality have programmed in water borne sanitation to your area. This may take 10 – 15 years. This will also be very expensive.

BASIC WATER SUPPLY



FULL PRESSURE WATER (not part of Water and Sanitation Project).



Now that I know about it, how can I go about organizing this water and toilet?

Each householder will have to complete an application form for a water connection and for assistance in the provision of a household toilet.

Where must I go to organize this and get the application?

The project offices are located at and the person to speak to is



eTHEKWINI CUSTOMER SERVICES



HEALTH AND HYGIENE RELATED ISSUES

The Cycle of Disease

What is a cycle?

A cycle is something that keeps going round and round without any change. Although sometimes it is good to have a cycle, like the cycle of life, there are also bad things that get into a cycle.

One type of cycle that is bad is the cycle of poverty and another bad cycle is the cycle of disease.

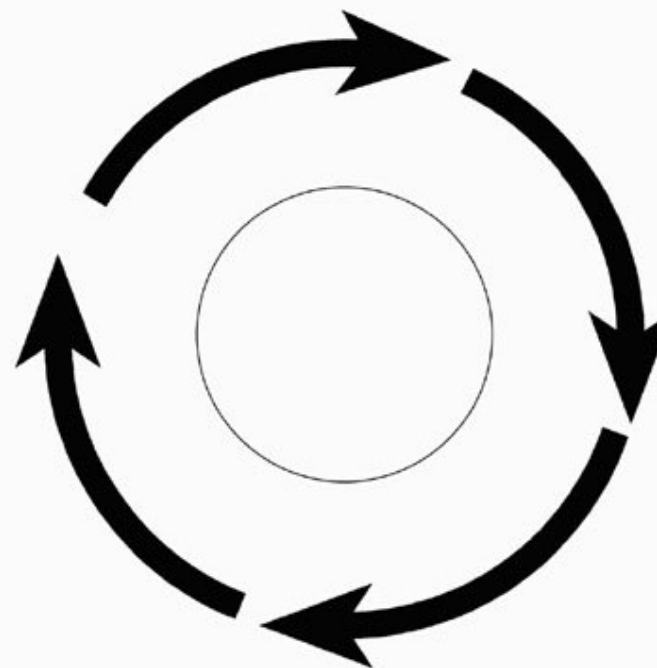
A **cycle of disease** is bad, because it makes poor health keep going around.

It is important to understand how disease can be spread, so that we can break the bad cycle of disease.

Certain bad habits can result in diseases. Many South Africans die from diarrhoea caused by a bad cycle of disease.

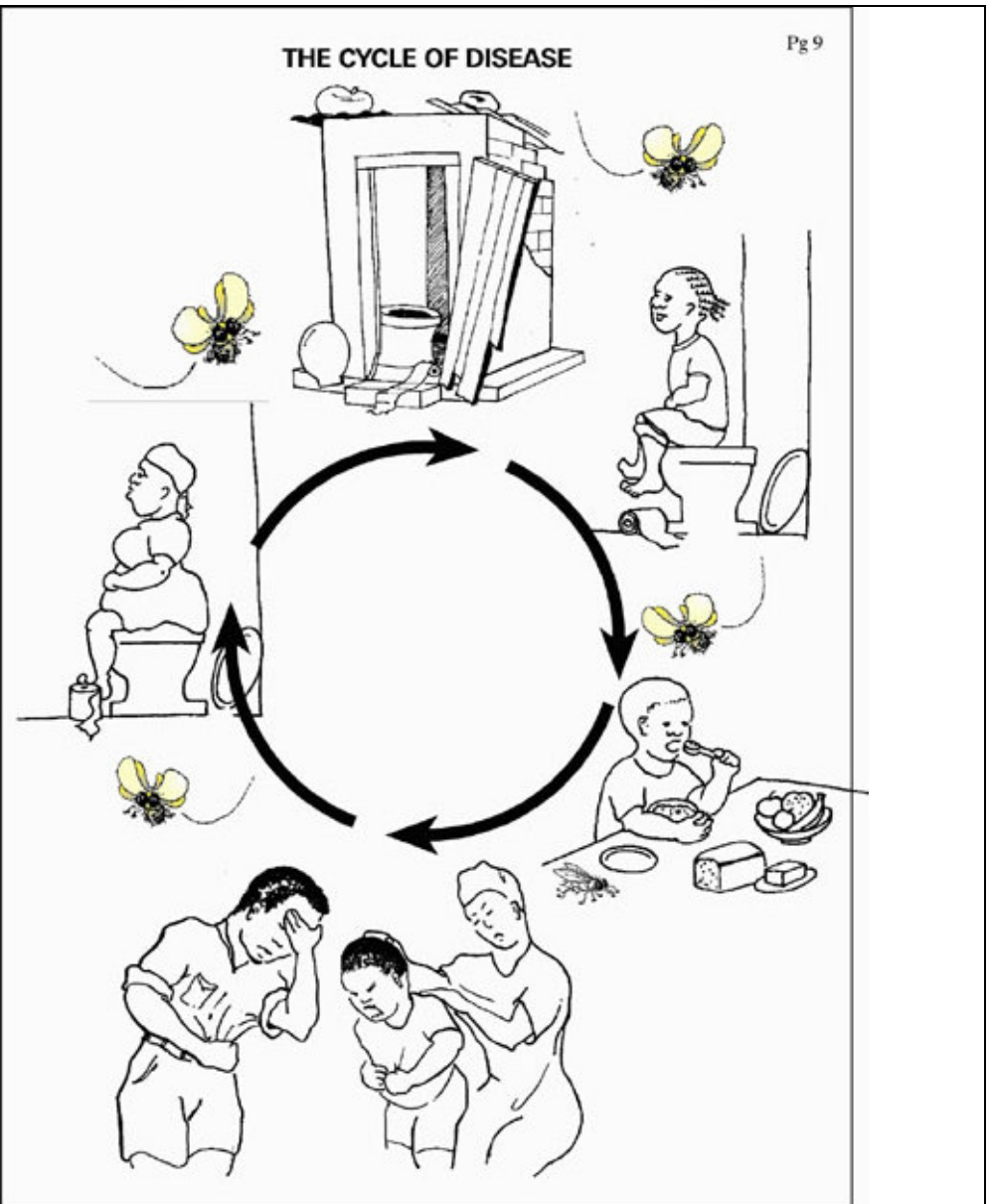
A CYCLE

Pg 8



What are some of these bad habits and how can we change the cycle of disease?

Look at the pictures on the page : there is a picture of a dirty and smelly toilet. There is another picture of flies and another picture with rats. As you can see, there is also a picture of a family that is sick. All of these things work in a cycle and the disease does not go away, unless some clean habits are created.



What are some diseases you know about that can be caused by dirty habits?

Cholera is one disease that is caused by dirty habits. The germs of cholera multiply rapidly in water and are also carried in the faeces of infected people, so if people go to the toilet in a river or wash infected babies nappies in the water, the water becomes full of disease and the cycle of disease continues.

Other diseases caused by dirty habits are worm infections and bilharzia which flourishes where sanitation is not good.

Our bodies can be carriers of germs.

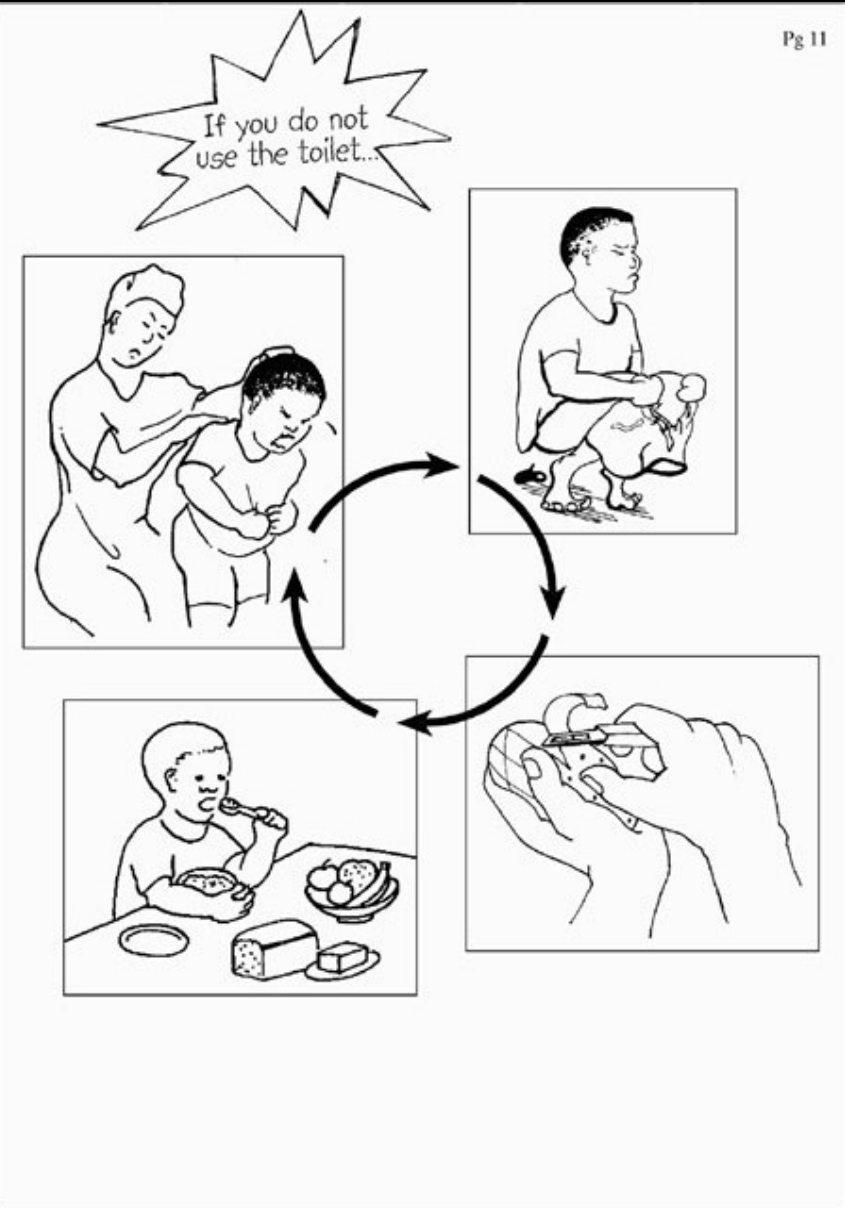
Germs from faeces or urine can stay on our hands and be carried, onto our food and into our mouths.



If faeces are left uncovered in fields, they are exposed to germs in the air as well as diseases carried by flies and rats.

If we step on the faeces we can spread those germs.

We need water to keep alive, but as you have learnt, water can also carry disease. It is therefore very important to keep our water clean and to keep our toilet areas clean too.



How do we change our habits to be clean habits?

- We need to use toilets
- We need to wash our hands, with soap and water or with sand, after using the toilet
- We need to keep our toilets clean
- We need to keep our toilets closed to prevent flies getting in
- We need to wash our hands before preparing food
- We need to cover food and water and keep utensils clean
- We need to throw baby's faeces in the toilet
- We need to wash dirty and wet nappies and hang them in the sun to dry



- We need to wash our hands with soap and water after changing a baby's nappy
- We need to teach children to use the toilet from a young age
- We need to make sure that nothing that will not dissolve is put into the toilets (use toilet paper or other soft paper if possible and never put any type of cloth or disposable nappies down the toilet)
- We need to put rubbish in a separate covered area and not throw it into the water or toilet

GOOD HABITS LIKE THESE WILL PREVENT ANY CYCLE OF DISEASE

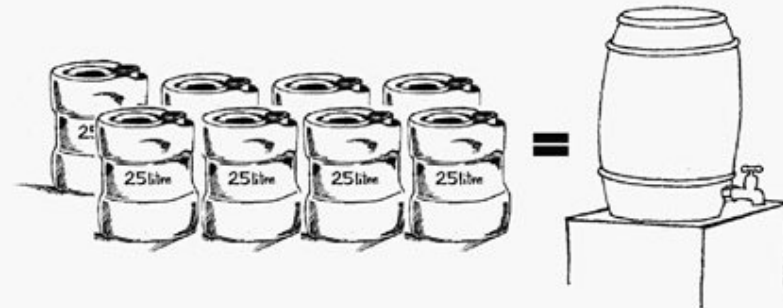
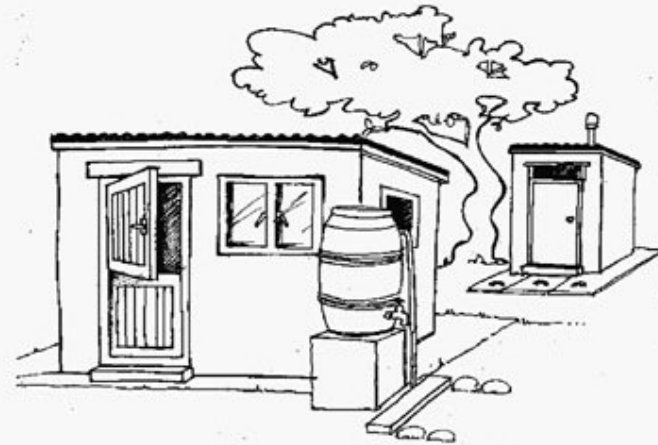


WATER

***I know I will get water free,
but how much water will I get?***

Each household will receive 200 litres of free water per day in a ground tank which will automatically fill up every night with clean water. The filling is automatic and there will be no more than 200 litres of water available every day. It is therefore not possible to have additional water even if the householder is prepared to pay for it.

Pg 14



What if this is not enough water for my home?

The water that will be stored in the ground tank is good quality potable (drinkable) water and should be used for drinking and washing. Water for outside uses like building and gardening can be taken from natural local sources like rivers and dams.

Where will my water be stored?

Each household will be able to get water supplied to and stored in a ground tank. On the facing page you can see a picture of what a ground tank will look like.

How does the ground tank get filled?

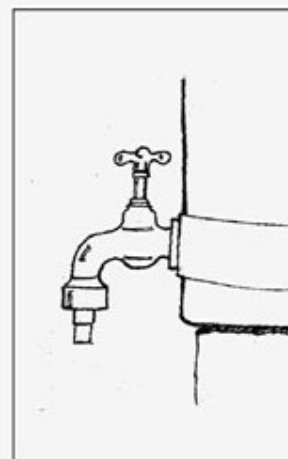
There is an automatic “baillif” that fills the tank every night. At a set time every night the ground tank will be filled automatically through pipes connected to the system.

Will I get taps?

There will be one tap on the ground tank.



Pg 15



How do I organize this?

The householder will have to complete an application and pay for a water connection.

After I have made the application, what do I have to do?

Each household will be required to lay the pipe from the water dispenser and to construct the base on which the tank sits.

The Householder will be trained how to lay and connect the pipe.

(After paying the connection fee, the materials will be provided as well a the ground tank. Once the ground tank is in position and the water switched on, the household will receive 200 litres of water free every day.)

Who will train me?

You will be trained by the municipality.



TOILETS

What about my toilet?

The municipality has designed a special toilet. The toilet is easy and safe to use. The toilet is called a Urine Diversion toilet (UD).

Who will build my toilet ?

Once a household has been visited and they understand how the toilet works then the Municipality will ask a contractor to build the toilet. The householder can ask the members of the PSC about when the toilet will be built.

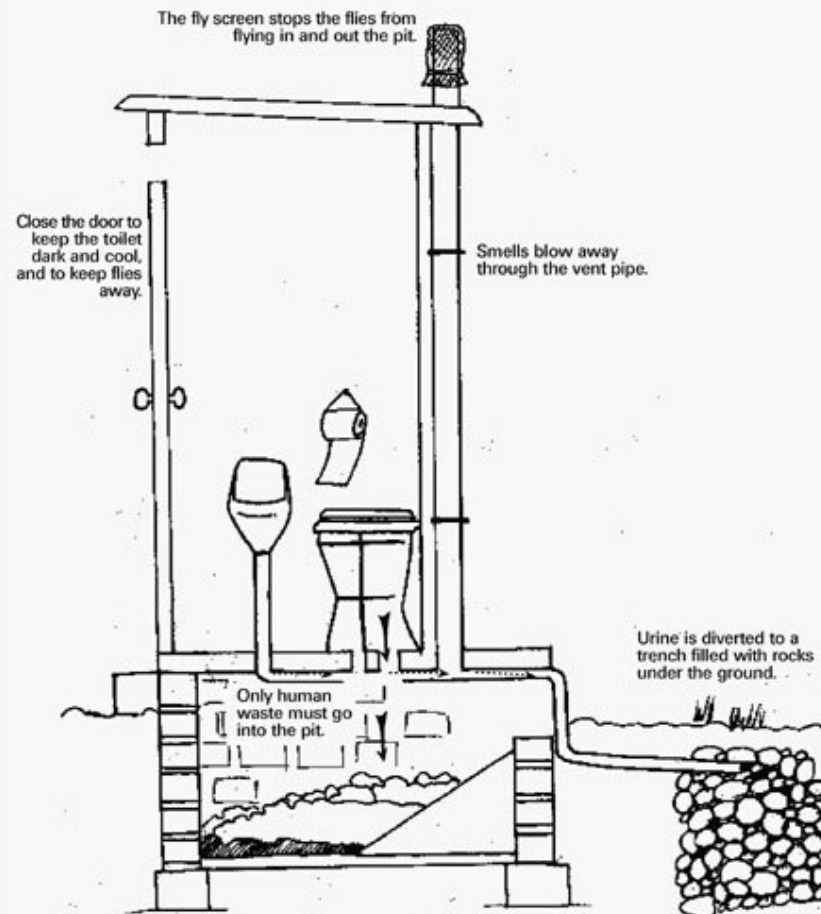
What does it look like?

The actual toilet consists of two chambers which are half in the ground. On top of the chambers is a small room with a door. Inside the room there is a pedestal and a urinal. The urinal and the front part of the pedestal is connected to pipework – the pipework allows the urine to flow into a trench or hole under the ground filled with rocks.

HOW A URINE DIVERSION (UD)TOILET WORKS

Pg 17

The UD (Urine Diversion) is a toilet that separates urine and faecal matter. It is important to operate and maintain the toilet properly to prevent smell and flies which could cause the spread of disease.



IT IS IMPORTANT TO:

**Make sure that the fly screen is not broken or blocked. Replace if it is broken.
Keep the toilet door shut.
Close the lid of the toilet.**

Is the toilet private?

The chambers are enclosed by a structure (a building that surrounds them) which provides privacy.

Is there anything else inside the structure?

Inside the structure you will find the two chambers, a toilet pedestal and a separate urinal for the men.



How do I use the toilet?

Where there are the two chambers, you will first place the pedestal (where you sit) over one chamber. Only one chamber is used at a time. The faeces will drop into one chamber and you must cover the faeces with a cup of sand.

The pedestal is also very special. It has a separate pipe which allows urine to flow into the ground and not into the chamber.

The human waste (faeces) if kept dry and covered with sand will break down naturally and will become like compost, but it is very important to keep the faeces dry.

This is why the urine has a separate pipe.

The separate urinal is for men to use when they pass urine.

The urine pipe in the toilet pedestal is mainly for the ladies, young girls and for small boys when they need to pass urine.

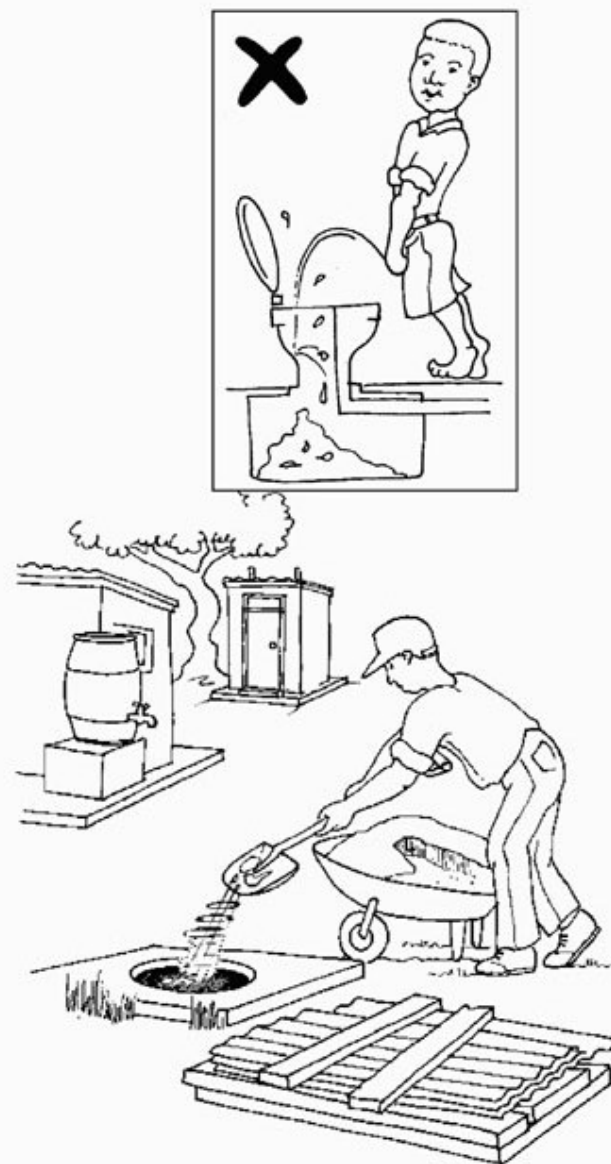


Why must the urine be kept separate?

If the urine is allowed to enter the chamber where the faeces go, then it will begin to smell and will attract flies, because the faeces need to be kept as dry as possible so that they form a type of compost.

If I have a pit latrine, what should I do with this existing structure when I have a new toilet?

The old toilet should be pulled up and the pit covered to prevent the spread of disease. The top structure should also be demolished.



Can I see a picture of what the toilet looks like?

You will see a picture of the toilet on the facing page.

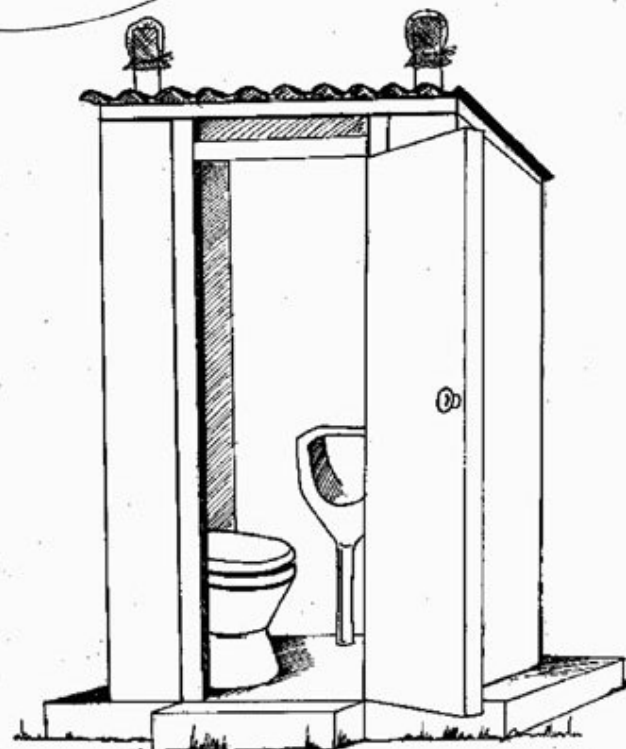
You may remember that it is called a Urine Diversion toilet.

As you can see in the picture, the toilet :

- Has a surrounding building (to make sure it can be closed against germs and can allow privacy) with an entrance door
- Has two chambers below the ground in which the faeces are collected.
- Has a lid or a seal that can be placed over the chamber that is not being used and which will seal the chamber
- Chambers are kept closed but can be exposed by opening up the panels at the back of the toilet.
- Has a moveable toilet pedestal with a seat and a lid on top of the seat.
- Has a urine diversion section in the front of the pedestal.
- Allows urine to flow through the urine diversion to a hole in the ground and the urine then seeps into the surrounding soil.

Has two vent pipes in the surrounding building (top structure) with a fly screen on top of each one

What does the toilet look like?



Why do we get the Urine Diversion toilet – is it good?

The UD toilet is good because it :

- Does not smell because it has a vent pipe that sticks out of the roof
- Does not smell because the urine is allowed to flow into the soil below ground
- Does not attract flies because they cannot get in.

Why is it necessary to have a ventilation pipe?

The word “Ventilation” means the way that air flows. Look at the picture – this will show you how the air moves in and out of the toilet enclosure.

- Fresh air comes through air spaces at the top and bottom of the entrance door or around the door
- The fresh air flows through the toilet hole
- Bad, smelly air goes up the vent pipe which sticks out above the toilet, and this bad smelling air is blown away by the wind.

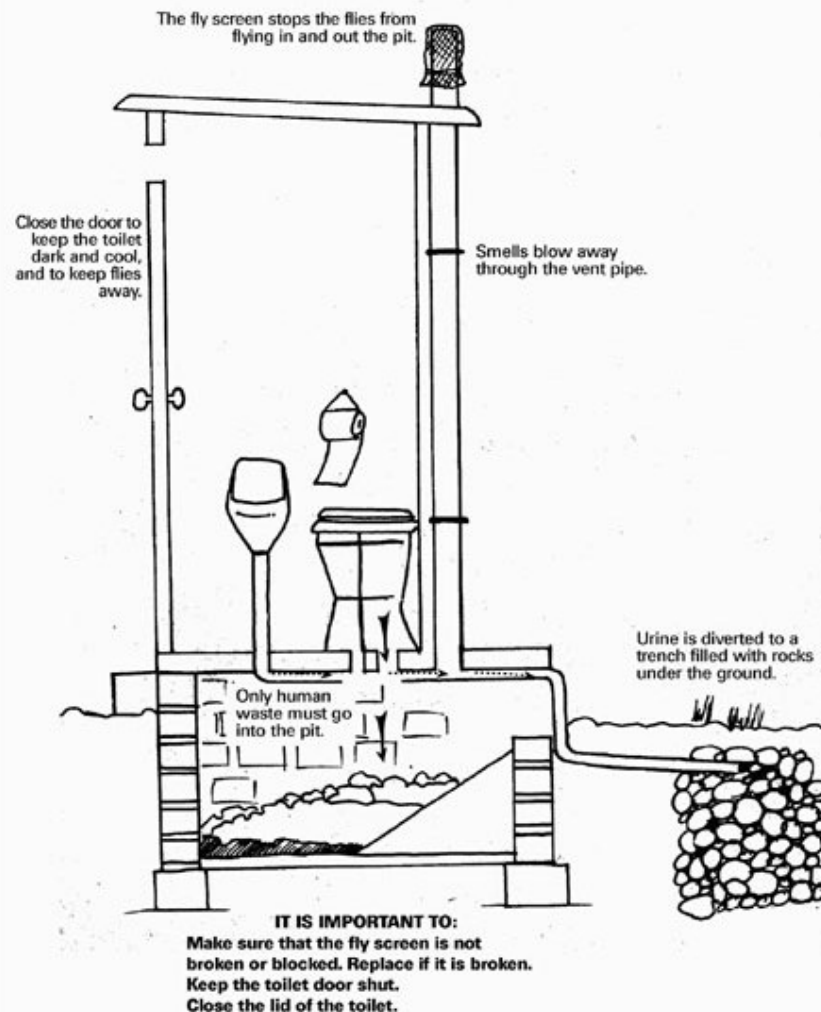
(Remember :

It is important to make sure that the top end of the vent pipe is cut straight so that the air can be pulled away from all sides. The top end of the vent pipe must be covered with a mesh fly screen to keep flies and germs from getting in and out of the toilet enclosure.)

HOW A URINE DIVERSION (UD) TOILET WORKS

Pg 22

The UD (Urine Diversion) is a toilet that separates urine and faecal matter. It is important to operate and maintain the toilet properly to prevent smell and flies which could cause the spread of disease.



What can be thrown into the toilet?

It is really important to throw only

- Soft paper or
 - Toilet paper
- Into the toilet.

Can we use anything else instead of paper or toilet paper?

It is better not to use anything which is wet or which is not natural. Only dry natural material like dry leaves and the outside leaves of corn cobs can be used. Natural material is anything like leaves, or things which are normally used to make compost.

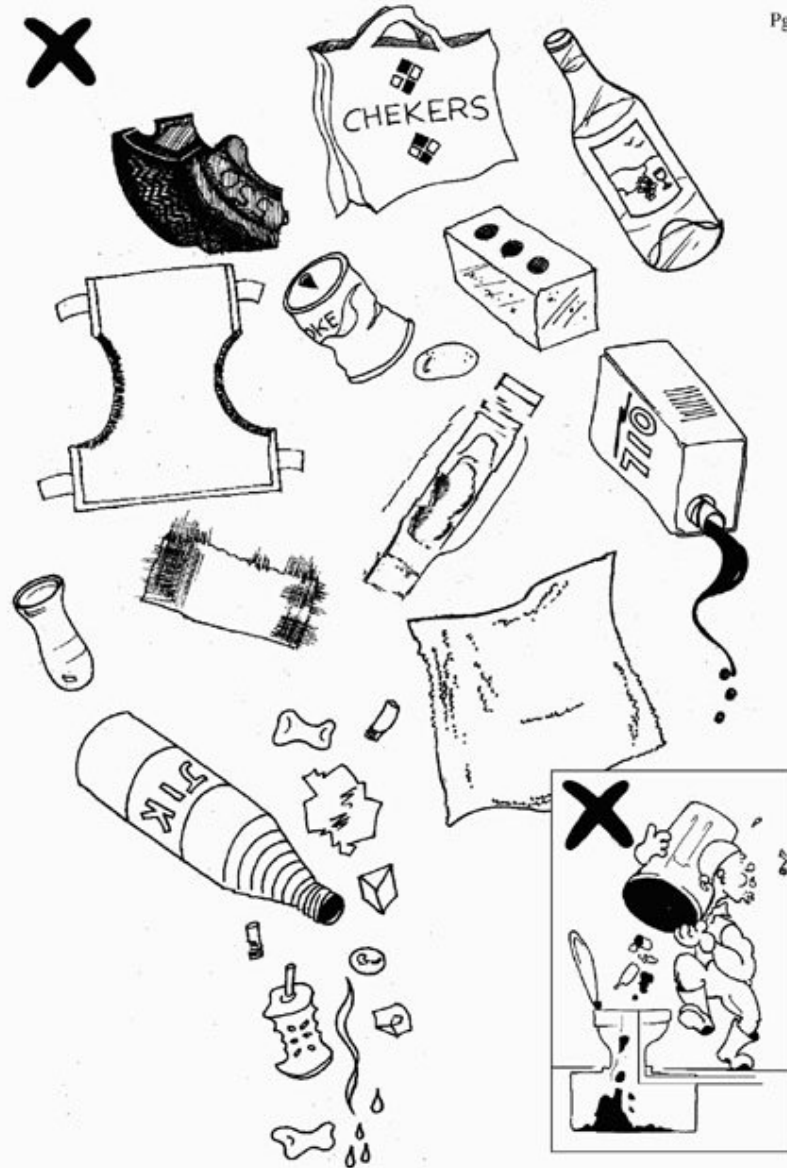


What should not be thrown into the toilet?

It is really important **NOT** to throw any

- cloth
- sanitary towels
- disposable nappies
- condoms
- plastic
- cans
- motor car oil
- rubber
- bricks
- stones
- glass
- jik, jeyes fluid or other toilet cleaners

into the toilet.



What happens to the faeces in the chamber?

1 The soil helps to break the faeces down. It keeps the faeces dry and helps to form compost.

Is it that important to keep the faeces material dry?

Yes, it is important to keep the faeces as dry as possible to make the composting happen and to prevent unpleasant smells in the toilet, so remember :

- When urinating, it is important to pass urine into the separate pipe.
- After defaecating, a small amount of sand is poured in to the toilet to cover the faeces in the chamber.

The toilet can now be used again and again.





What happens when the first chamber is full?

The pedestal is removed and it is placed over the other chamber.

A cover is placed over the full chamber. The contents of the full chamber are then left alone while the other chamber is used.

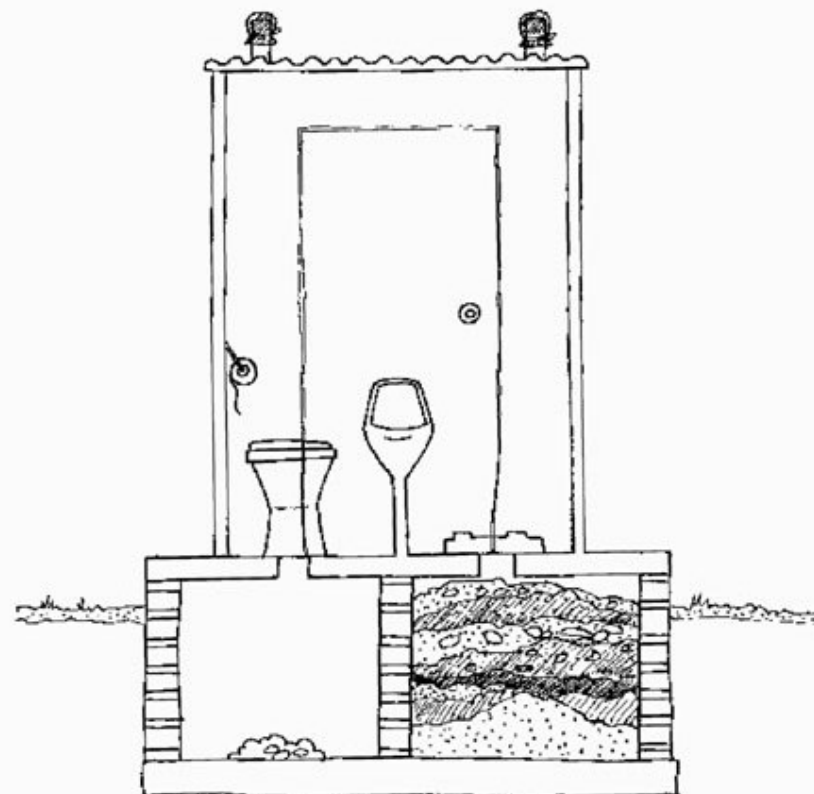
Then, when the other chamber is full, the back of the first chamber is opened and the soil and decomposed faeces is raked out of the chamber. At this time, the faeces has no smell and looks like dry sand.

The material should then be buried.

Once the chamber is empty the pedestal can be moved again once the other chamber is full.

Who will remove the compost from the chamber when it is dry and composted?

The householders need to rake the dry sand and compost from the chamber when it is dry. That is why it is so important to try and make sure that the chamber is kept as dry as possible and that only natural material goes into the chamber, to help the composting process.



Do I get anything else with my toilet?

You will be given :

- A bucket, which must be kept in the toilet and must be kept full of sand. One cup of sand must always be spread over the faeces in the back part of the toilet. The sand **MUST** not go into the front chamber, (where the urine is diverted).

You will also need :

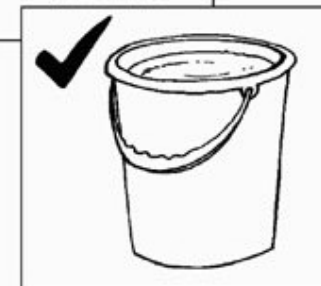
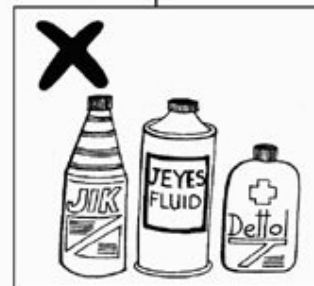
- A rake which can be used to rake the dry sand and composted faeces from the chamber when it has been composted.



What do I use to keep the toilet clean?

It is important to keep the toilet as dry as possible. Soap and water should only be used to wipe the toilet seat and pedestal and to clean outside the toilet building.

Jik, Jeyes Fluid, Sanpic and other toilet cleaners must never be used in the toilet as they kill the natural bacteria that break down (reduce) the waste.





NOTES

How do I make sure that my toilet keeps working properly?

Remember :

- Paper should be used for anal cleansing as opposed to cloth.
- Water should not be poured down the toilet.
- Urine should as far as practical not be allowed to enter the chamber.
- Car oil should not be poured into the toilet.
- The pedestal can be cleaned using paper or a damp cloth but wash your hands after cleaning the pedestal.
- Do not use JIK to clean the toilet as it kills all the good bacteria in the interior of the toilet clean and tidy.
- Ensure that the vent pipes have an adequate fly screen on the open tops.

What if my toilet does not work?

It is very important that the householder looks after the toilet and its building, and repairs anything that might be broken or is not working. Once the toilet has been handed over to the householder, the only responsibility of the Municipality is to fix the water supply system if that is not working.

KEEP YOUR TOILET WORKING HEALTHILY AND HYGIENICALLY.



1. Faeces are deposited into the back of the toilet bowl, and ladies urinate into the front part.



2. Do not defecate into the front of the toilet.



3. Ash or sand is thrown over faeces after each use. Do not pour water into the pit.



4. Males must not urinate into the back of the toilet, use the separate urinal.



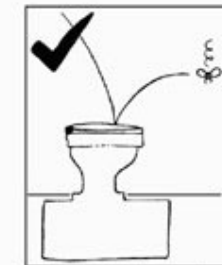
5. Men and boys must use the separate urinal.



6. Do not throw rubbish into the pit.



7. Clean the urinal with fresh water. Do not use disinfectants.



8. Keep the lid of the toilet closed to keep flies out of the pit.



9. Always wash your hands after using the toilet.

Look after your toilet :

Can you remember all the things that you should **not** put in your toilet?



Here is a reminder for you :

DON'T PUT THESE IN THE TOILET :

- cloth
- sanitary towels
- disposable nappies
- condoms
- plastic
- cans
- motor car oil
- rubber
- bricks
- stones
- glass
- jik, jeyes fluid or other toilet cleaners

KEEP YOUR TOILET AREA CLEAN

Also it is important to make sure your toilet area is kept clean. Only wash the outside of the pedestal.



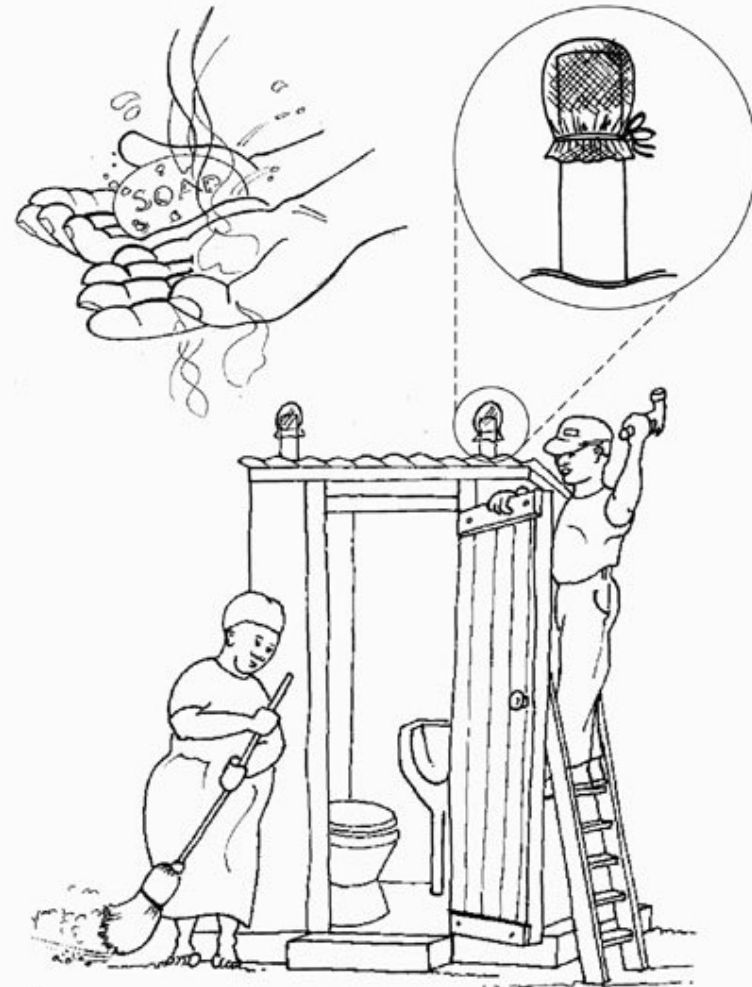
KEEP YOUR HANDS CLEAN

Remember to wash after using the toilet.

LOOK AFTER THE BUILDING THAT SURROUNDS THE TOILET

Check that there are no cracks in the building – fix holes in the walls, door or roof to stop water getting into the toilet area.

Check that the vent pipe does not get broken or blocked and that the fly net covers the top. Replace the pipe if it gets broken, to stop the flies getting in and the cycle of disease from beginning



REMEMBER :

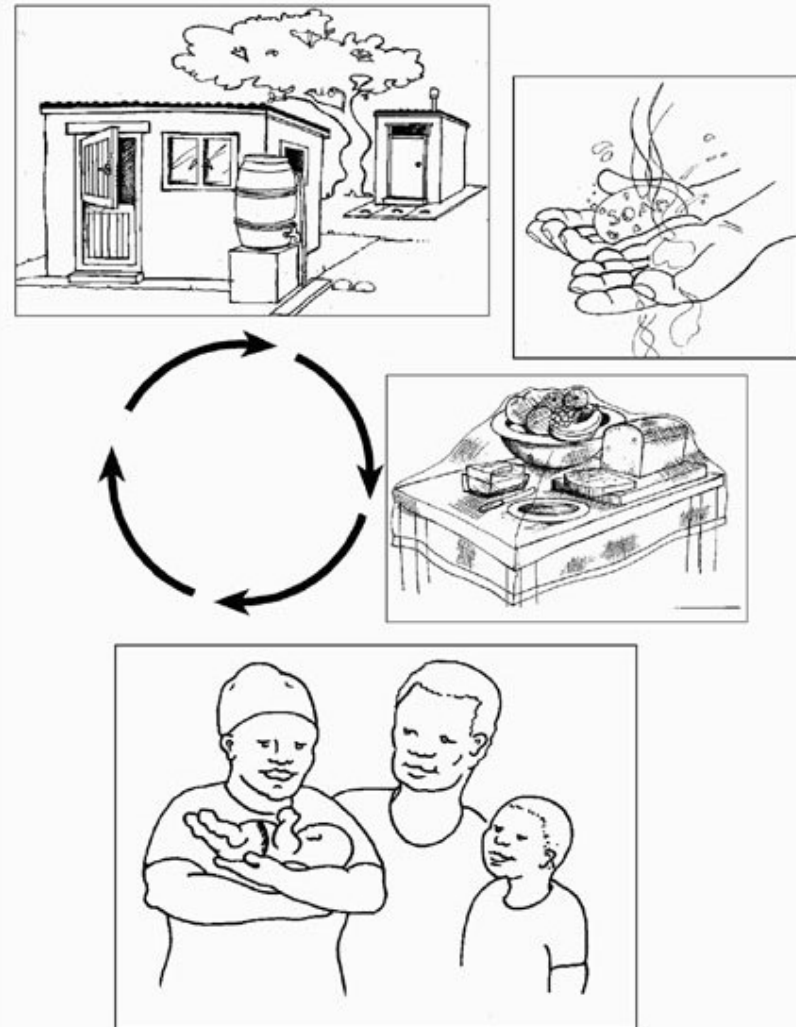
The purpose of providing a new toilet structure is to ensure that the cycle of disease is broken and that good sanitation and good clean habits are established to provide a good cycle of health and hygiene.



Water and toilets make sure that a GOOD CYCLE OF HEALTH can be part of your family life.

THE CYCLE OF GOOD HEALTH

Pg.32



POSSIBLE FREQUENTLY ASKED QUESTIONS

∞ The facilitators should be advised how to handle questions when they are in the field (doing facilitation) and get asked difficult to answer questions. These questions only need to be addressed if a specific enquiry is made in any of these areas.

Φ It is recommended that the facilitators close their files at this stage and a role play is facilitated, with the following possible frequently asked questions used, and each the response of the facilitators assessed.

Υ 40 minutes

It needs to be pointed out to the facilitators that these questions only need to be addressed if a specific enquiry is made in any of these areas.

- ***Is the connection fee really a one-off payment?***

Yes

- ***Will they not be asked to pay again at a later stage?***

No

- ***What kind of water supply will be provided?***

The basic level of water supply that will be supplied as a part of the project will be a ground tank that will be filled automatically every night with 200 litres of free water.

- ***Are there different types of water supply?***

Yes there are three types of water supply that are approved by the eThekweni Water Services these are:-

1. Full pressure water.

The householder should have internal plumbing and must be prepared to pay for the water that is used.

2. Roof tank

The householder must be prepared to pay for water that is used but need not have internal plumbing. A tank in the roof is filled and then water is drawn off as required by the householder.

3. Ground tank

This the basic form of water supply. The householder receives a tank which is placed outside and which is filled every night with free 200 litres of water.

- ***I have a water supply to a yard tap. What should I do?***

Do not worry about this you will be allowed to keep the yard tap or you can ask to be converted to a ground tank. You will still be part of the project and you will receive a Urine Diversion toilet.

- ***What happens if I already have full pressure water supply?***

If you have full pressure water supply and can prove that you have been paying for the water that you use then you can continue using the service. You can also ask to be converted to a groundtank which will be done free of charge. The eThekwini Water Services will advise you regarding how to dispose of the waste water.

- ***Can I get a Urine Diversion Toilet if I have full pressure water?***

Yes you can get a Urine Diversion toilet as part of the project unless you already have a flushing toilet. If you have a flushing toilet you must connect this toilet to a septic tank. You can get further information about how to build a septic tank from the eThekwini Water Services. If you have a yard tap with full pressure water supply then a larger soakaway will be constructed to ensure that the waste water is correctly disposed.

- ***What happens if I have an illegal connection to a full pressure main supply line?***

If you approach the eThekwini Water Services then they will convert the water supply to a groundtank supply or if you pay the connection fee to a legal full pressure water supply – you will then be required to pay for the water that you use. Unless you have a flushinh toilet and aseptic tank you will still receive a Urine Diversion toilet.

- ***What happens if I already have a flushing toilet inside my house?***

If you already have a flushing toilet then you will not get a Urine Diversion toilet. You must ensure that the sewage from the toilet is connected to a septic tank and a soakaway. Please ask the eThekwini Water Services for further information

- ***Who can give me further advice regarding septic tanks and soakaways?***

The technicians who work for the eThekwini Water Services and who are responsible for the project in you area will be able to help you.

- ***How much soil should be used to put on top of the faeces?***
About one cup

- ***How long will the faecal material take to dry out?***

If the toilet is operated correctly, the faecal material (when covered with soil) should take four to six weeks to dry out. However, the faecal material in one chamber can remain there for the duration in which the other chamber is used (six to twelve months) before it would need to be removed.

- ***Who will fix the toilet if something happens?***

If parts of the toilet are broken, it is the responsibility of the householder to fix those items. When the chambers are full, it is also the responsibility of the householder to empty the chambers. The municipality is not responsible for maintenance of the toilet or the toilet structure.

- ***Is the ground tank guaranteed?***

The suppliers of the ground tank guarantee that the tank will not leak if used correctly and if it is not abused.

- ***Who will fix it if it cracks?***

If the ground tank leaks because it is cracked and it can be shown that the ground tank has not been abused, then the suppliers will replace the ground tank.

**eThekweni Municipality
WATER AND SANITATION PROGRAMME**

QUESTIONNAIRE

(TO BE COMPLETED BY THE FACILITATOR IN THE PRESENCE OF THE HOUSEHOLDER)

∞ The facilitator needs to go through each question and ensure that the facilitators understand the content of each question. Facilitators should write their own explanations on the questionnaire in their files to confirm this.

Φ It is important that the ISD Consultant hands out an additional copy of the questionnaire to the facilitators. The facilitators will then work in pairs and will “interview” their partner and complete (fill out) the additional copy. This copy will then be checked by the ISD Consultant to ensure that the facilitators understand what they are completing.

Υ 20 minutes

-
1. The location of the household
 2. The name of the householder
 3. Does the householder have a Metro number ?
Yes • No •
(If there is no Metro number available, the facilitator needs to advise the ISD consultant of this.)
 4. The (eThekweni) Metro number (unique number given to each particular household within the Metro).
.....
 5. What is the existing infrastructure available to the household?
a) Sanitation facilities? Describe.....
b) Water – infrastructure? Describe.....
 6. What is the current method that the householder uses to dispose of solid waste?
.....
 7. How many people live in the household?.....
 8. Does the householder want to receive 200 litres of free potable water per day?
Yes • No •
 9. Does the householder want to have a toilet system that will work?
Yes • No •
 10. Is the householder willing to contribute in labour to setting up both the water and the toilet system?
Yes • No •
 11. Is the householder interested in seeing the toilet and the water system that will be provided by the Municipality to the household?
Yes • No •