EnviroSan
SANITATION SOLUTIONS™

ENVIRONMENTALLY FRIENDLY

PROUDLY MADE IN SOUTH AFRICA

THE PEOPLE OF AFRICA DESERVE BETTER

MORE THAN 75 000 LITRES OF DRINKING WATER SAVED PER HOUSEHOLD EVERY YEAR!

AGRÉMENT SOUTH AFRICA
innovative construction product assessment

A PROUDLY BLACK OWNED ENTERPRISE

EnviroSAN
SANITATION SOLUTIONS™

A PROUDLY BLACK OWNED ENTERPRISE

EaziFlush™ HELPING MUNICIPALITIES PROVIDE DIGNIFIED AND SUSTAINABLE SANITATION SOLUTIONS

EFFECTIVELY USED THROUGHOUT SOUTH AFRICA AS A SOLUTION FOR BUCKET ERADICATION.....

FOR THE SAME PRICE AS A VIP SYSTEM !

FLUSHES WITH 2L OF WATER

CERTIFICATE 2015/475
AGREMENT SOUTH AFRICA

BRIDGING THE GAP IN SANITATION

When properly designed, built and maintained, the VIP provides a decent basic level of sanitation, However most people prefer a higher level of sanitation, with the flushing toilet being the most desired. The problem with conventional flush toilets is that they require a large amount of water, which is not always available or affordable. Coupled with the excessive amount of water used to flush the toilets are the on-going leaks which place unnecessary pressure on our already water scarce country. VIP toilets, whilst, not requiring water to operate, have inherent problems as they do not have a water seal, can smell extremely bad and attract flies. Thus, the majority of households prefer to have the toilets constructed a significant distance away from the homestead which in turn creates a safety factor for children, the elderly and women wanting to use the toilet when it is dark.

In a VIP scenario the pit is directly below the top structure resulting in communities using the pit as a solid waste disposal site and consequently the pits fill up much faster. When the pits are full, emptying is a messy, unpleasant and expensive operation.

RETROFIT EXISTING FULL VIP WITH EAZIFLUSH SANITATION SYSTEM AND POLYMER DOOR

INSTALLATION OF NEW PRECAST STRUCTURE WITH EAZIFLUSH SANITATION SYSTEM AND POLYMER DOOR

RETROFIT EXISTING UDDT / DOUBLE VIP UNIT WITH EAZIFLUSH SANITATION SYSTEM AND POLYMER DOOR, WHILST MAINTAINING SECONDARY CHAMBER AS A BACK UP

EaziFlush®

The pour flush toilet was designed to have an off-set pit which is not directly below the structure, making the unit safe and allows easier access when emptying is required.

The Eaziflush system requires no mains water connection as it flushes manually by pouring as little as 2 litre of water **(or grey-water)** into the toilet bowl, compared to 9 litres or more of potable water for a conventional toilet. In a dense urban context, the pour flush toilet may be installed closer to the user or inside the house.

The Eaziflush Sanitation System is an integral off grid sanitation solution.

THE EAZIFLUSH REVOLUTION

Our patented Eaziflush system can easily be adopted for use in all areas, ranging from rural to urban, including areas with water supply as well as areas with limited or restricted water supply. The Eaziflush system will revolutionise the way we use the toilet and allow Municipalities to roll out dignified and sustainable sanitation solutions that are well received by all stakeholders. The unit can either be used as a pour-flush application or as a conventional cistern flush unit. The Eaziflush has been developed over 5 years of research, prototyping, testing and is now on national roll out. The pour-flush style of sanitation is extensively used throughout South East Asia with a proven track record over the past 50 years.

RATIONALE

- **Eaziflush unit (6 occupants, 5 flushes per day) = 60L required**
- **Conventional 9L unit (6 occupants, 5 flushes per day) = 270L required**

The advantage of the Eaziflush unit can clearly be seen in terms of aiding water conservation in Southern Africa compared to conventional water borne sanitation systems, even in the absence of using grey water to flush the system.

Potable water saving used for flushing the toilet is in excess of 75 000L of water per year, per household. If this is multiplied by the number of households in SA (estimated at 8.4m), we are looking at a potential saving of 630 000 000 000L of water per year.

OFFSET LEACH PIT SAFE & EASILY ACCESSIBLE

RURAL, PERI-URBAN AND /OR URBAN COMPATIBILITY

For outlying rural areas, the Eaziflush unit can be designed to feed into a leach pit, septic tank, bio-digester or similar on-site / off grid treatment facility. For peri-urban areas it can be designed to feed into a septic tank or further into a bio-digester. For urban areas, the Eazifush can feed into a conventional sewer system. The Eaziflush can be used in all environments and be adapted to work with all sanitation treatment / containment facilities currently on the market.

science & technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

This new toilet technology is based on the "pour flush" system which is widely used in Asia. Its adaptation for South Africa has been researched and tested in the field since 2010 by the engineering company Partners in Development, working on behalf of the Water Research Commission of South Africa. The injection moulded pedestal and P Trap has been made by the company Envirosan. This demonstration project has been funded by the national Department of Science and Technology, and facilitated by the Amajuba District Municipality.

The advantages of the Pour Flush Toilet are:

Advantages compared with VIP

a) Has a water seal, which eliminates odours and insects
b) Users do not see contents of pit when using toilet
c) Users do not use toilet as a solid waste disposal pit, so it lasts longer
d) Leach pit is not under toilet, so structure is safer
e) Leach pit is fully offset from structure, making it easier to access for maintenance
f) Pit sludge is easier to remove than VIP sludge as it is trash free

Advantages compared with full flush

a) Uses only 1 to 2 litres to flush (depends on whether users have urinated or defaecated, and on whether toilet paper or newspaper is used for anal cleansing
b) No toilets leaking 24/7, using up precious and limited water resources

Note that this toilet can be upgraded to work with a cistern so that you do not need a jug to flush. Any competent plumber can help with that. To save water the cistern should be set to flush using 3 litres or less.

PROJECT PARTNERS

Envirosan SANITATION SOLUTIONS WWW.ENVIROSAN.CO.ZA

AMAJUBA DISTRICT MUNICIPALITY

PARTNERS IN DEVELOPMENT PID CONSULTING ENGINEERS PROJECT MANAGERS

WATER RESEARCH COMMISSION

Acknowledgments & Certification

AGRÉMENT SOUTH AFRICA
innovative construction product assessments

CERTIFICATE NO:
2015/475

Confirmation of Certification

AGRÉMENT CERTIFICATE 2015/475

is awarded to:

ENVIROSAN SANITATION SOLUTIONS CC

in recognition of:

Ventilated Improved PIT and Urine Diversion Toilet System

which certificate provides detailed information on the performance in use and the uses of the subject of the certificate. When presented as proof of certification this document must be accompanied by the abovementioned certificate or by a certified copy of the typescript of the certificate approved by the Board.

CHAIRPERSON
Mr Pepi Silinga

From: Kwenzekile Simelane [mailto:Kwenzekile.Simelane@kzndhs.gov.za]
Sent: 03 December 2015 03:55 PM
To: Travis Duggan <Travis@envirosan.co.za>
Cc: Tim Krause <tim@envirosan.co.za>; Jacques Rust <jacques@envirosan.co.za>; Dlaine Duval <DLAINE.DUVAL@kzndhs.gov.za>; Thobile Ntuli <THOBILE.NTULI@kzndhs.gov.za>
Subject: RE: Department of Human Settlements approval for Envirosan Sanitation Solutions

Dear Travis

Thank you for the email and information attached there in.

This is to acknowledge that you visited our office of Department of Human Settlements Product Development office to introduce your product Envirosan Sanitation Solutions.

We are in the process of arranging a workshop for product suppliers to present their products to relevant stakeholders in project implementation management in Human Settlements which will be held in February 2016. We will invite your company to take part therein.

We note that your presented certificates of NHBRC and Agrément and we advised that the Department recognise and find such certification acceptable to be considered in project implementation. We also advise that when approaching Implementation Agents to be considered in a project for supplying your product to submit your certificated to be verified by NHBRC.

We will contact you for further arrangements on the workshop

Regards

Mrs Kwenzi Simelane PrArch (SACAP), MIA (SAIA)

Chief Architect

031 – 336 5360

073 3015257

human settlements
Department:
Human Settlements
PROVINCE OF KWAZULU-NATAL

NHBRC

ASSURING QUALITY HOMES

12th November 2015

Attention: Mr. Tim Krause

C/o Envirosan Sanitation Solutions cc

P O Box 1769

New Germany

3620

Dear Sir,

HIGH DENSITY POLYMER ENVIRODOOR

The National Home Builders Registration Council (NHBRC) acknowledges your Agrément certificate [#2015/475]. This letter serves to confirm that the NHBRC accepts a valid Agrément certificate as a demonstration of compliance with the requirements of the National Building Regulations. The certificate must be used in accordance with the NHBRC requirements as outlined in Part 10 of the Home Building Manual, 2015.

Upon enrolment please ensure you supply a copy of the full active certificate. And, in the case of a licensee, also provide a copy of 'confirmation of registration as licensee' from Agrément South Africa.

Yours Sincerely,

Jeffrey Mahachi (Pr.Eng, Pr.CPM)
Advisor: Special Projects

tel: +27-11-317 0074 | fax: 0866-378-782 (direct)

cell: +27-82-804-6669 | toll free: 0800 200 824 email: jeffreym@nhbrc.org.za

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NHBRC

ASSURING QUALITY HOMES

12th November 2015

Attention: Mr. Tim Krause

C/o Envirosan Sanitation Solutions cc

P O Box 1769

New Germany

3620

Dear Sir,

VENTILATED IMPROVED PIT AND URINE DIVERSION TOILET SYSTEM

The National Home Builders Registration Council (NHBRC) acknowledges your Agrément certificate [#2015/475]. This letter serves to confirm that the NHBRC accepts a valid Agrément certificate as a demonstration of compliance with the requirements of the National Building Regulations. The certificate must be used in accordance with the NHBRC requirements as outlined in Part 10 of the Home Building Manual, 2015.

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Yours Sincerely,

Jeffrey Mahachi (Pr.Eng, Pr.CPM)
Advisor: Special Projects

tel: +27-11-317 0074 | fax: 0866-378-782 (direct)

cell: +27-82-804-6669 | toll free: 0800 200 824 email: jeffreym@nhbrc.org.za

Bridging the gap in sanitation

ARTICLE FROM GOVERNMENT GAZETTE JULY 2016

When properly designed, built and maintained, VIPs (ventilated improved pits) and UDDTs (urine diversion dehydration toilets) provide a decent basic level of sanitation. However, most people prefer a higher levelof sanitation, with the flushing toilet being the most desired.

The major problem with conventional flushing toilets is that they require a significant amount of water (usually nine litres per flush), which is not always available or affordable. Coupled with the excessive amount of potable water used to flush conventional toilets, are the ongoing leaks which place unnecessary pressure on our already water scarce resources.

The EaziFlush™ revolution

As a major player within the sanitation industry for the past 10 years, **Envirosan Sanitation Solutions™** has always been committed to supplying sanitation solutions that not only meet but also exceed the needs of all stakeholders, communities, municipalities and parastatal departments alike.

Envirosan's patented **EaziFlush™** System was developed over five years of extensive research, with both the Water Research Commission in Pretoria and Partners in Development in KZN, both of which have independently tested and rolled out the system in various projects throughout South Africa.

Every household, no matter whether in the outlying rural or peri-urban areas (where potable water is not made available to the individual household,) still has access to enough water (either being collected from streams/rivers, and/or rain water harvesting and/or communal taps), which they rely on for washing, bathing, cleaning and cooking. The **EaziFlush™** can be easily adapted for use in all areas, ranging from rural to urban, including areas with limited or restricted water supply.

As a pour flush, the **EaziFlush™** solution is entirely off-grid and requires no mains water connection, as it **flushes manually, with as little as two litres of grey water,** thus placing absolutely no strain on the rural households' limited access to potable water supply, whilst simultaneously provided a safe and hygienic method for the disposal of the households' grey water. The **EaziFlush™** has been designed to be compatible with a range of rural "back end" solutions, including a leach pit, septic tank, conservancy tank, biodigestor, solids-free sewer system or similar onsite/off-grid treatment facility, **without any adverse effects on the surrounding soil conditions.**

As a low flush (ie conventional flush with a cistern), the **EaziFlush™** solution **flushes with as little as two litres of water,** as opposed to the conventional nine litres usually required, translating to a significant benefit to not only the end user, but also the municipality and water service authorities. The EaziFlush™ has been designed to be compatible with a conventional sewer system, and places far less strain on the sewage treatment plants, as a result of the great reduction in the volume of water required for flushing.

Water is life, and therefore, saving water equates to saving lives

The **Eaziflush™** operates effectively as a direct water saving sanitation solution.

When comparing the **Eaziflush™** system to conventional water borne sanitation systems (even in the absence of utilizing grey water as flushing medium), the following become apparent:

- Eaziflush™ Solution (six occupants each flushing five times per day) = 60 litres
- Conventional toilet (six occupants each flushing five times per day) = 270 litres
- **Daily minimum water saving per household = 210 litres**

Easily installed inside the house and referred to as the "safe toilet" by SA communities

Bridging the gap in sanitation

ARTICLE FROM GOVERNMENT GAZETTE JULY 2016

This is an effective saving in excess of 75 000L of water per household per year! Extrapolated over the number of households in SA (estimated at 8.4m), there is a potential saving of 630 Billion Litres of water per year!

Envirosan™ is exceptionally proud of the 15 000+ **Eaziflush™** units that have been rolled out throughout Southern Africa to date, many of which have been used in new housing schemes, eliminating "reverse backlogs" when VIP pits are full / no longer meet a required standard as well as numerous bucket eradication programs.

All of these added benefits for the same price as a VIP/UDDT

There is little doubt that the **EaziFlush™** represents a major upgrade from both the VIP and UDDT systems, which currently are the standard for basic sanitation in South Africa. **The EaziFlush™** has the ability to replace the VIP/UDDT system in its entirety, due to the fact that the entire system costs approximately the same as said systems, with the following significant advantages:

Suitable for rural, peri-urban or dense urban environment

- There is absolutely no smell or access for flies! This is due to the effectiveness of the water seal within the patented P-trap, which only holds a maximum of 750 ml water, compared to the standard 2 litres of water contained in a conventional toilet's P-trap. In a dense urban/peri-urban/rural context, the **EaziFlush™** can either be installed closer to (or even inside) the homestead. due to the fact that the water seal prevents any unpleasant odours, which ultimately ensures the safety for ALL users of the unit, specifically at night time.
- **The EaziFlush™** system provides a higher standard of basic sanitation, with increased dignity to the end user. Users don't see the contents of the pit due to its offset nature and, therefore, can't use the toilet for solid waste disposal, effectively lengthening the lifespan of the pit and minimising emptying costs.
- Community members commonly refer to the system as the "safe toilet", as there is no open pit below the toilet, thus negating the horrific incidents where children have tragically fallen into VIP pits in the past
- The system is extremely robust and easy to operate, with minimum maintenance requirements and limited risk involved.
- **The EaziFlush™** can be upgraded from pour flush to low flush with the addition of a cistern. Once sewage and water connections are available, it can be connected at a minimal cost! Retrofitting is a simple process!
- **All Envirosan™** pedestals are precision injection moulded from SABS approved virgin raw material, thus resulting in an extremely high quality and hygienic finish to the products. We are exceptionally proud of the fact that all our pedestals carry the Agrément Certification, and are fully endorsed by the National Home Builders Regulation Council and Department of Human Settlements.

Ultimately, the EaziFlush™ can be used to not only eliminate exiting sanitation backlogs, but also eradicate reverse sanitation backlogs, in order to provide users with a dignified sanitation solution which they are content to use and so rightly deserve, without placing any strain on our already scarce water supply, and at no additional cost to municipalities!

Panel Discussion with Brian Lewis

ARTICLE FROM W&S AFRICA MAGAZINE SEPT./OCT. 2016

What products and services do you offer that support government's demand-side management and water conservation strategy?

BL Envirosan has been involved in the sanitation industry throughout Africa for the past 10 years, and manufactures various sanitation technologies from ventilated improved pit toilets (VIPs) to urine diversion dry toilets (UDDTs) to low-flush toilets. After five years of research, development and prototyping, it's our newest innovation – our trademarked EaziFlush – that really has the industry excited. The Eaziflush can be used either as a pour-flush or a conventional low-flush toilet, and was developed in conjunction with the Water Research Commission (WRC) and Partners in Development (PID) to deliver a hygienic, low-water sanitation option to all communities – from people living in urban, peri-urban or rural communities to those living in informal settlements.

Brian Lewis *Managing Director*

The EaziFlush incorporates a child-friendly seat to enhance child safety, as well as a water seal within the unit, which eliminates the odours and fly breeding commonly associated with VIPs and UDDTs. Our advanced precision injection moulding facilities ensure repeatable quality to not only meet but also exceed market expectations.

What design innovations make the Eaziflush ideally suited to water savings in South Africa and, hopefully, the rest of the continent?

To understand what makes the product innovative, you have to look into the challenges the solution was designed to overcome. Government engineers and planners in South Africa are engaged in the delivery of improved sanitation to the 11% of South African households without sanitation services. An additional 26% of households have sanitation services that do not meet national standards for dignified sanitation. In addressing these issues, many engineers were stuck in a binary way of thinking, which is why a paradigm shift was needed. Towns and cities were generally characterised by flush toilets and piped infrastructure, while people living in townships usually used pit toilets of one type or another.

Panel Discussion with Brian Lewis (cont...)

Full flush is extremely expensive, not only in terms of actual water consumption but also in terms of infrastructure maintenance. VIP toilets are more robust, and require less maintenance but have also been known to exhibit several issues when it comes to unpleasant odours and child safety. Additionally, VIPs and UDDTs tend to fill up quickly and can be difficult to clean. Envirosan firmly believes that the people of South Africa deserve better, and thus invented the Eaziflush toilet, which combines the advantages of both dry and flushing systems without any of
their disadvantages.

What, exactly, is a pour-flush toilet and how does it save water?

A pour-flush toilet looks very similar to a full-flush toilet, but does not utilise a water tank, cistern or flushing handle. Cistern leakage can cause huge water losses, and by taking this element out of the equation, it's only the actual toilet flushing (which uses very little water) that's necessary. The EaziFlush is flushed by pouring two litres of water into the pan, which, because of the design of the unit, is sufficient to fully clear all waste from the bowl and also serves to form a water seal within the p-trap to effectively prevent any odours in the pit from making their way back up through the toilet. As a pour-flush option, rain water, river water or grey-water can be used to flush the toilet, thus providing the household with a safe and hygienic means of disposing of grey-water, while simultaneously ensuring that the limited potable water that is available to households is used for drinking, cooking and cleansing.

How have you ensured the Eaziflush's flexibility, adaptability and applicability in the local market?

The Eaziflush is the first fully upgradeable sanitation system of its kind. Our VIP 200 product can be upgraded to a urine diversion system and further upgraded as either a pour-flush or low-flush (i.e. with or without a cistern) toilet – both of which flush with only two litres of water. The Eaziflush is compatible with a wide range of treatment solutions (from conventional sewer and solids-free sewer connections, to septic and conservancy tanks, biodigesters, leach pits and others) and, in addition, is able to connect to standard plumbing fittings, allowing flexibility along with maximum water savings

Eaziflush

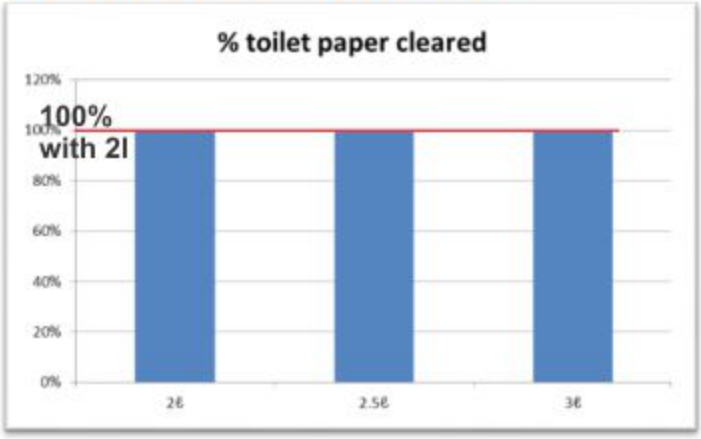
Pour Flush

Conventional Low Flush

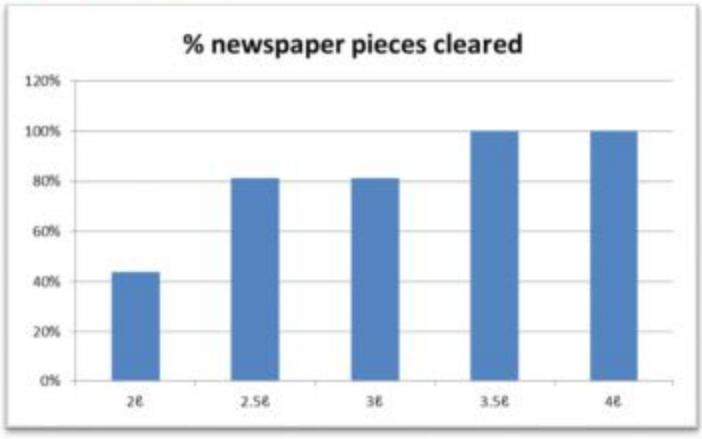
Product Testing

Various flow and flush tests have been conducted, both for pour flush and econo-flush

Conventional Pour Flush



Low Flush



2 litre flush,
4 stool samples,
5 balls of toilet paper

(Independent testing courtesy of PID)

Eaziflush Insert & P-trap

Eaziflush Options

Pour-Flush

Conventional Low Flush with patented Leak Free Cistern

Eaziflush as Pour-Flush (Treatment options - Leach Pit)

Eaziflush & Soil Contamination

- The are NO adverse affects on soil conditions as a result of using leach pits
- The following papers support this:

Pit latrines and their impacts on ground water quality: a systematic review Environmental Health Perspectives

Groundwater Contamination due to pit latrines located in a sandy aquifer WRC

Entrenchment of Pit Latrine and Waste Water Sludges, an investigation of Cost, Benefit, Risk and Rewards - WRC

Advantages

- Looks and operates similar to conventional flushing toilets BUT uses only 2 litres of grey water to flush, representing a potable water saving of in excess of 200 litres per household per day!
- Users don't see the contents of the pit due to its offset nature & therefor can't use the toilet for solid waste disposal, effectively lengthening the lifespan of the pit and minimising emptying costs;
- SAFE toilet – no risk of children falling into the pit as the pit is not under the toilet structure, meaning the chance of collapse during rainy seasons is also negated;
- Communities prefer the EaziFlush™ to Dry Sanitation as the unit can be constructed closer to the household and is hygienic (The water seal effectively eliminates fly breeding & unpleasant odours);
- The Pedestal is Agrement and NHBRC certified and on these grounds has been approved for use in housing projects by the Department of Human Settlement's;
- Upgradeability! The EaziFlush™ can be upgraded from pour flush to low flush with the addition of a cistern. Once sewage & water connections are available, it can be connected at a minimal cost!!!
- The EaziFlush™ is compatible with a multitude of "back-end options" including Standard Sewer Connection, Solids Free Sewers, Septic Tanks, Bio-Digesters & Conservancy Tanks etc.

Water Savings with the EaziFlush

(If potable water is used for flushing)

Water Saving– Conventional Toilet VS Eazi-Flush			
Household of 6 people:	In 1 Yr	In 5 Yrs	In 10 Yrs
Conventional Toilet uses:	98 550 l.	492 750 l.	985 500 l.
Eazi-Flush uses:	21 900 l.	109 500 l.	219 000 l.
Water Savings	76 550 l.	383 250 l.	766 500 l.

Water saving PER DAY:
>210 litres per household

Retro-fitment and Upgraded Sanitation Units

These are old VIP block and/or precast concrete structures, which are either full or in unusable state. The upgrades include the removal of the old VIP pedestal, covering of the pit and re-installation of an Eaziflush unit (pour flush application). In addition to the Eaziflush installation, the unit was further fitted with an Envirosan high-density polymer door and user education training completed.

Upgrading of existing concrete block structure from VIP to Eaziflush – including new polymer door

Eaziflush Sanitation Inside Existing / New Household Structures

These units have been installed inside either existing and / or newly constructed households. These Eaziflush units are operated as pour flush units, using predominantly greywater for flushing the bowl. The units can easily be upgraded to a flushing system and fitted with a standard cistern if so required by the homeowner.

Puthaditjhaba – Eaziflush inside household

Oakford housing project – Eaziflush inside household

HELPING MUNICIPALITIES PROVIDE DIGNIFIED AND SUSTAINABLE SANITATION SOLUTIONS

Typical Leach Pit Applications

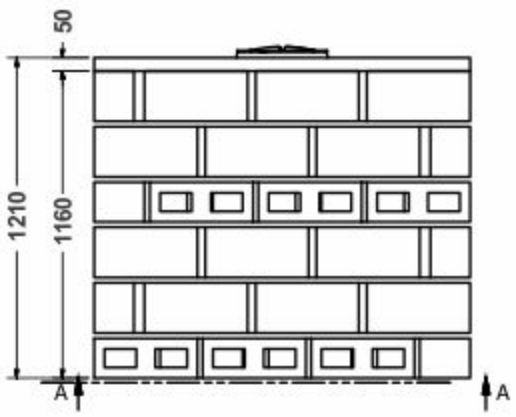
The majority of the Pilot sites were in predominant rural and peri-urban areas. Most of the areas were not serviced with conventional water borne facility as they all fell outside what is commonly known as the urban edge. A standard concrete block or precast concrete panel leach pit was deemed the best- suited application to receive the waste. These pits has proved to be the most viable option and through extensive studies, ***also proved NOT to have any adverse effect on the surrounding soil conditions***

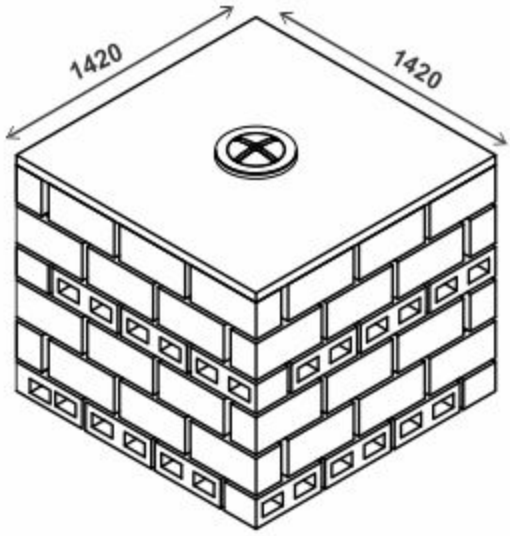
Precast concrete leach pit square / rectangular

Standard M6 concrete block Leach pit

Precast concrete leach pit circular

Leach pit: Diagram

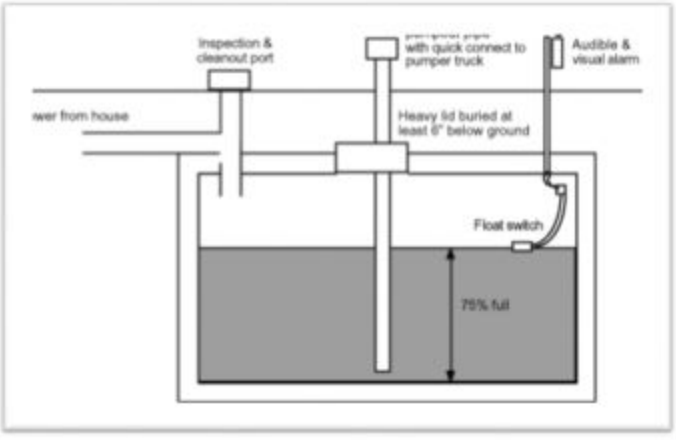




Eaziflush: Other Treatment Options

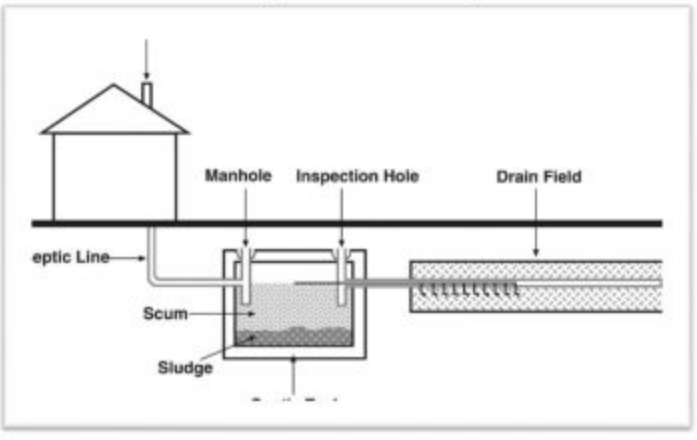
Conservancy Tank

- Temporary Holding
- Requires regular emptying
- Requires secondary treatment of waste



Septic Tank

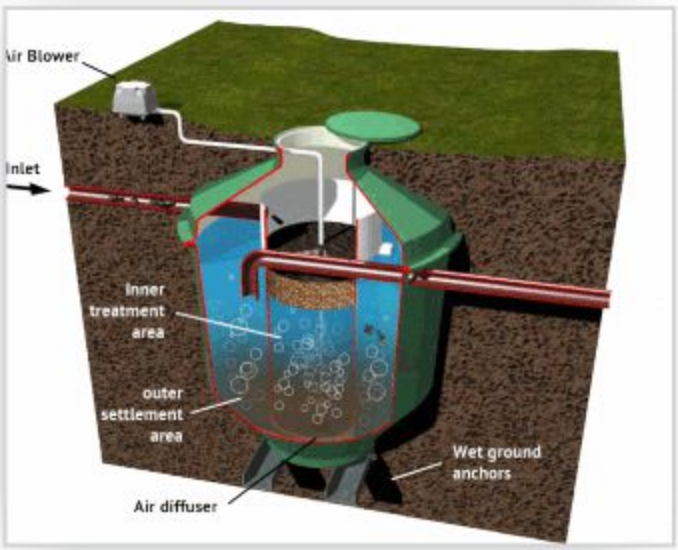
- Anaerobic waste treatment method
- Requires eventual emptying (20 yrs)
- Readily available kits
- No secondary treatment required



Eaziflush: Other Treatment Options (cont...)

Biodigester

- Anaerobic waste treatment method
- Requires eventual emptying (20 yrs)
- Readily available kits
- No secondary treatment required
- Produces valuable by product of gas
- Accepts all organic waste

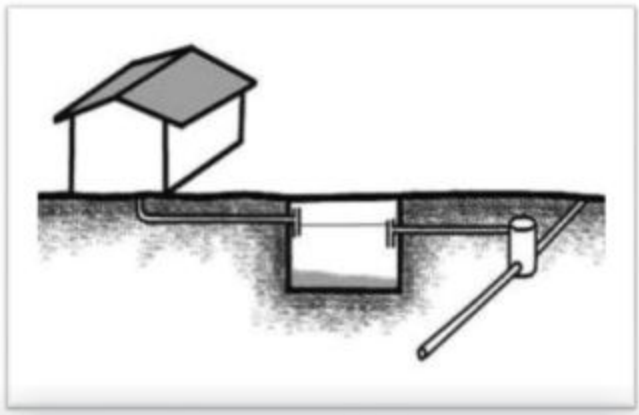


Conventional Sewer

- As per existing flushing sanitation treatment
- Plumbing required from household to existing line
- Full scale treatment works down the line

Solid Free Sewer

- Combines a septic tank/biodigester with a sewer line
- No solids pass through therefore smaller pipes required = cheaper installation
- Down the line water treatment required



Documented Papers

Developing a low flush latrine for use in schools:
WRC Report No. 2198/1/13

Pour Flush Trials in the Western Cape:
WRC Report No. K8/1018/3

Development and testing of timber frame pour flush sanitation blocks for use in schools and informal settlements: WRC Report No. K5/2407

Partners Involved

There are a number of different partners involved, from researching to testing to piloting, which includes,
but not limited to the following:

- Water Research Commission (WRC)
- Envirosan Sanitation Solution
- Partners in Development (PID)
- Department of Water and Sanitation
- Various Municipalities

Pour / Low Flush References

1) Mr. T. Tshivhasa	(Eastern Cape Department of Human Settlements)	+27 43 711 9592
2) Mr. D. Hendriks	(Overberg Municipality)	+27 82 416 8676
3) Mr. T. Malunga	(Sanitation Engineer)	+27 82 891 5730
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5) Mr. T. Gounden	(eThekwini Municipality)	+27 82 804 7299

Envirosan

SANITATION SOLUTIONS™

THE EVOLUTION OF THE TOILET

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