

# Pit ResQ



Directors: Natalie Killian



# CLEAN AFRICA ECO Pit ResQ

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# 1. Global **Sanitation** Challenges

It is estimated that 2.6 billion people lack access to adequate sanitation globally. Lack of sanitation facilities forces people to defecate in the open, in rivers or near areas where children play or food is prepared. This increases the risk of transmitting disease.

The World Health Organisation's Millennium Development Goals target 75% global sanitation.

By reaching this target it is estimated that the number of diarrhoea cases can be reduced by 391 million worldwide each year

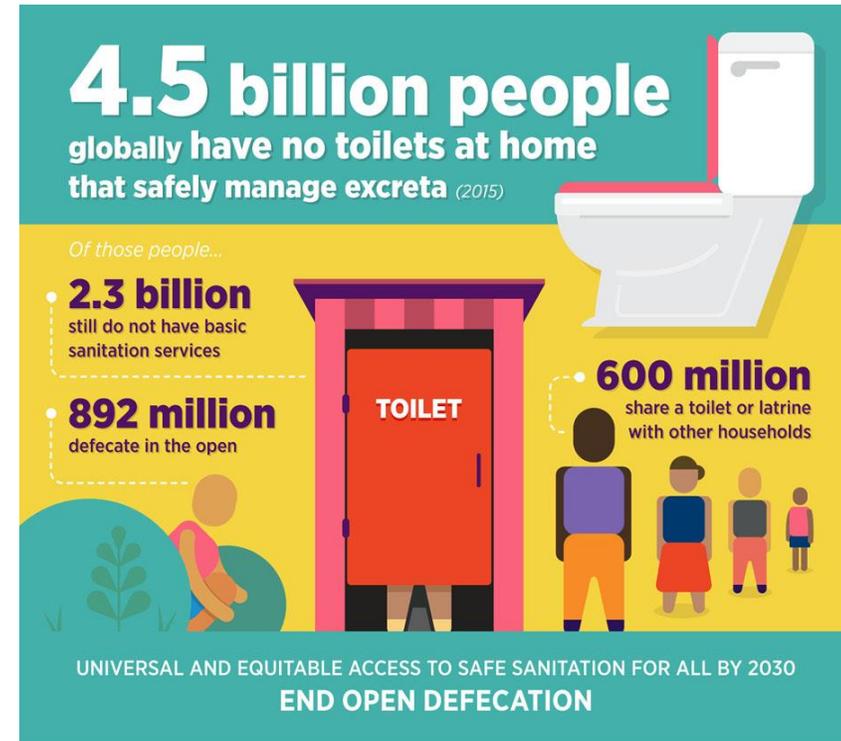
Examples of diseases transmitted through water contaminated by human waste include diarrhoea, cholera, dysentery, typhoid and hepatitis A. In Africa, 115 people die every hour from diseases linked to poor sanitation, poor hygiene and contaminated water



## 2. Global Facts

Diarrhoea is one of the leading causes of morbidity and mortality in South African children, accounting for approximately 20% of under-five deaths.

Though progress has been made in scaling up multiple interventions to reduce diarrhoea in the last decade, challenges still remain



# 3. Introduction to Pit ResQ

Another downfall with bacteria, it is expensive and the community who would use the product could not afford this type of treatment.

**Our challenge was to develop a product that is:**



Affordable



Not damaging to the environment



Eco Friendly



Easy to use



Works in a short time span

## Improved Sanitation Facilities

- Flush or pour-flush to:
  - Piped sewer systems
  - Septic tank
  - Pit latrine
- Ventilated improved pit latrine
- Composting toilet

## Unimproved Sanitation Facilities

- Flush or pour-flush to elsewhere
- Pit latrine without slab or open pit
- Bucket
- Hanging toilet or hanging latrine
- No facilities or bush or field

## 4. How does **Pit ResQ** Work

Pit ResQ is an organic waste digester. Pit Fresh requires a wet environment to initiate the process. It is necessary to mix the sachet with about 10 litres of water and then introduce the mixture to the pit ensuring it adequately saturates the waste in the pit.

The process begins immediately and depending on the volume of the waste significant results will be noticed within 48 hours

Pit ResQ not only reduces solid waste to a liquid but also contains a biocide to destroy the bacteria that makes the odours and worms. Therefore Pit ResQ is a complete solution for the pit toilet system.

The pit will last much longer by using Pit ResQ as once the solids have been liquefied the liquid will seep into the soil and not fill up with solid waste.

There are severe cases where the pit has been abused and under these circumstances a shock treatment is necessary to initiate the process. We have developed a product for this purpose.

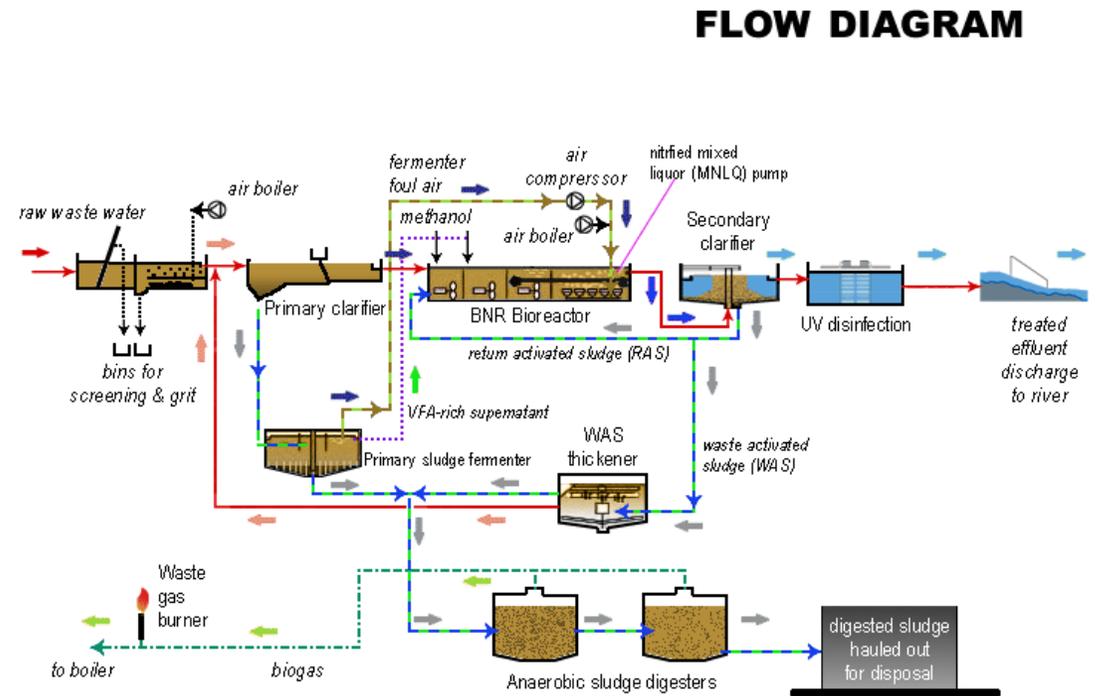
The product is called Pit Shock and should be used for a few weeks before reverting to the normal maintenance with Pit ResQ.



# 5. Advantages of Pit ResQ Infrastructure

We have successfully developed Pit ResQ

- Made in South Africa
- Job creation to communities
- It is affordable
- It disinfects the toilet instantly
- It reduces the sewerage levels in a very short time
- It kills all worms and maggots
- Eliminates flies that spread disease.
- Breakdown newspaper and toilet paper
- Never have to pump the toilet that is very expensive
- Unblocks Sewer Pipes, Toilets etc
- The product works and was tested in various areas in South Africa for more than 12 months
- Trained distributors that can communicate with the communities and municipalities
- Fixed affordable price to the end user to keep the price stable.
- Dramatically extends the life of the Pit Toilet



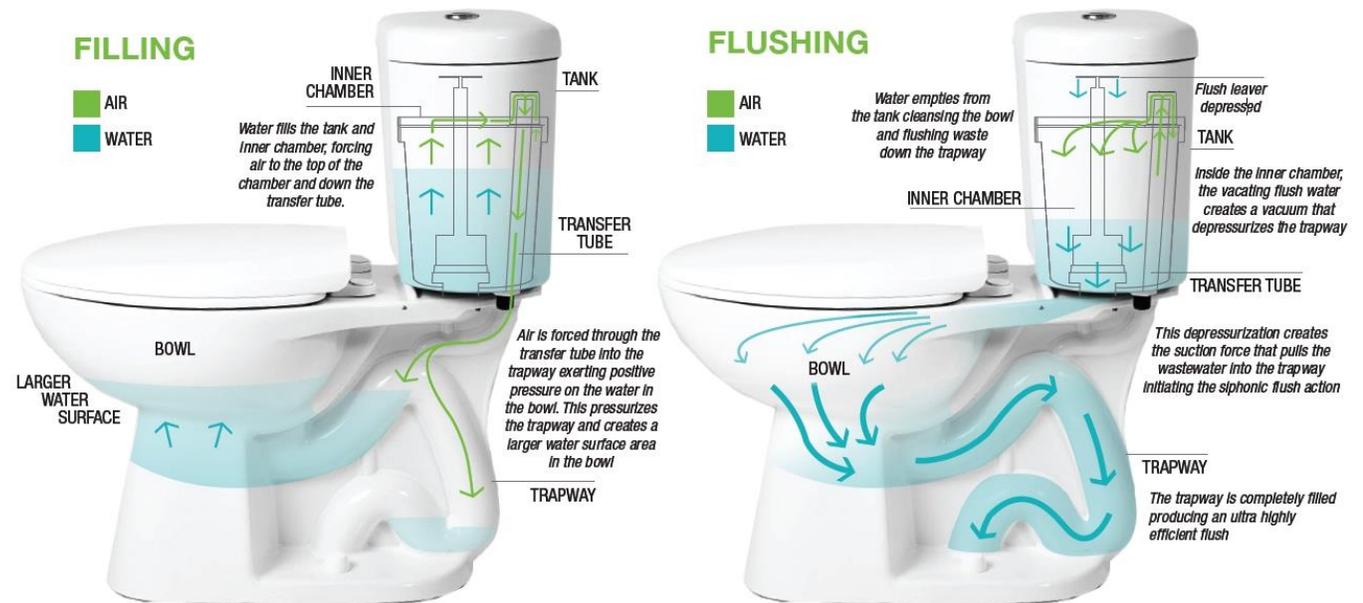
# 6. Uses of Pit ResQ in Sanitation Infrastructure

- Waterborne Toilets

This product can be used in the following areas:

• • • Waterborne Toilets

- To keep them clean
- To remove bad odour
- To unblock the sanitation pies
- To remove insects and worms



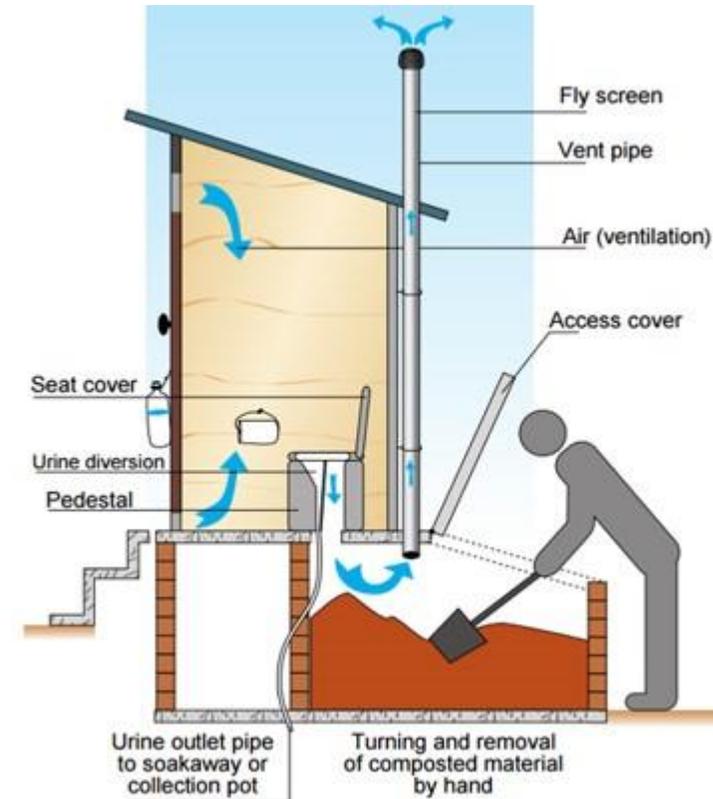
# 7. Uses of Pit ResQ in Sanitation Infrastructure

- VIP Toilets

This product can be used in the following areas:

○ ○ ○ VIP Toilets

- To keep them clean
- To remove bad odour
- Melt away solid waste and urine
- To remove insects and worms
- Does not fill up since the melted waste flows into the soil



# 8. Uses of Pit ResQ in Sanitation Infrastructure

- Pit Latrines

This product can be used in the following areas:

• Pit Latrines

- To keep them clean
- To remove bad odour
- Melt away solid waste and urine
- To remove insects and worms
- Does not fill up since the melted waste flows into the soil



# 9. Uses of Pit ResQ in Sanitation Infrastructure

- Sewer Plants

- It is affordable for the Government
- It disinfects the toilet instantly
- Removes bad odour immediately
- Does not fill up since the melted solid waste turns into water
- It reduces the sewerage levels in a very short time
- It kills all worms and maggots
- Eliminates flies that spread disease
- Breakdown newspaper and toilet paper
- Melt away solid waste and urine
- Dramatically extends the life of the Infrastructure



# 10. Uses of Pit ResQ in Shopping Malls

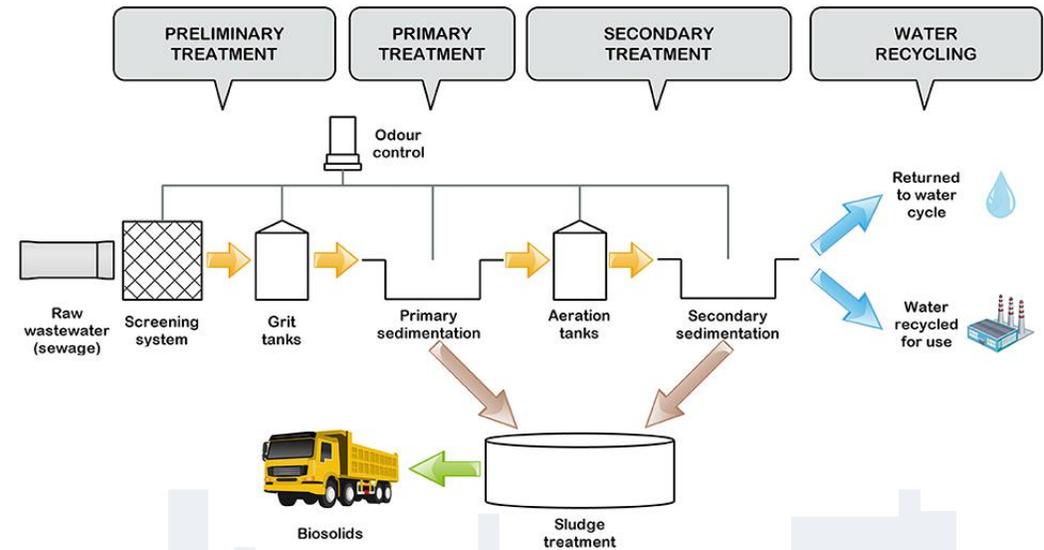
- Used for cleaning oils and fats that accumulates in the pipes
- Unblocks pipes
- Reduces rapid ageing of infrastructure
- Dramatically extends the life of the Pit Toilet
- Clean and quick – does not require shut down of the Malls



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# 11. Health & Environmental Benefits Using **Pit ResQ**

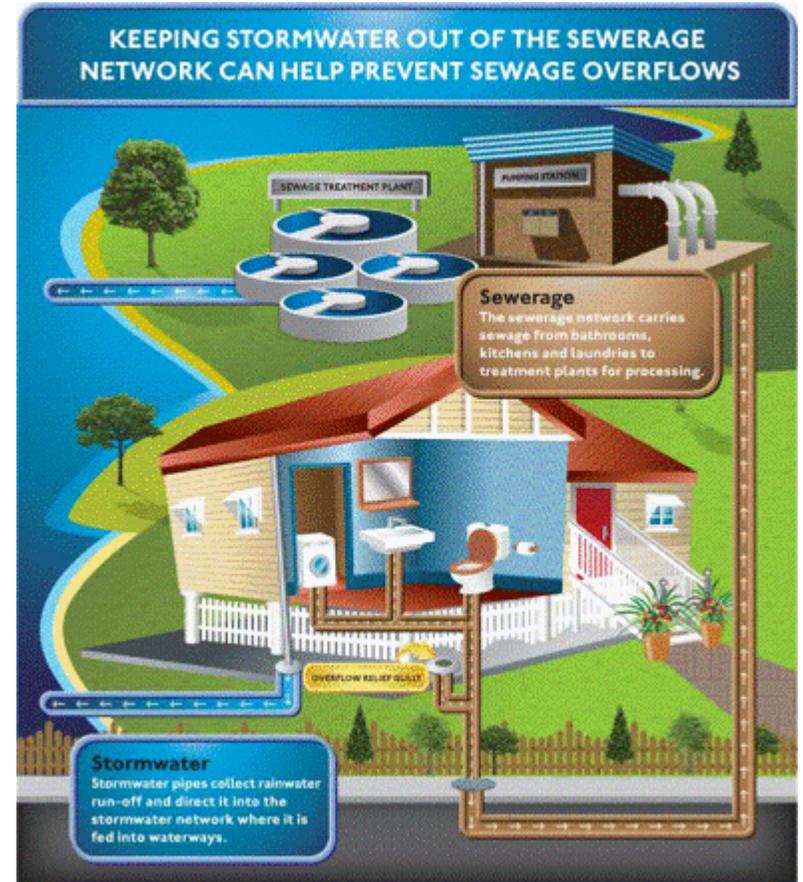
- Clean spaces
- Fresh smell not foul odour
- Prevention of sewer related bacteria and viruses to generate
- Does to damage the environment
- Does not kill fishes nor make them barren
- Cleans water of any sewer related waste
- Environmentally friendly and safe product



# 12. Conclusion

Preventive measures are key and the government should focus on improving water, sanitation and hygiene.

The investments required to achieve these results seem feasible considering current health expenditure.





 011 869 0040

 [info@cleanafricaeco.co.za](mailto:info@cleanafricaeco.co.za)

 2 Holkham Road, Paulshof, Sandton

 [www.cleanafricaeco.co.za](http://www.cleanafricaeco.co.za)

NATALIE KILLIAN

079 569 0010

[natalie@cleanafricaeco.co.za](mailto:natalie@cleanafricaeco.co.za)

