



The ultimate
self-cleaning
system for your
water tank



Clean water

How important is it to you?

Harvesting and storing rainwater is a simple and efficient way to provide a safe, natural water supply. Being a free resource, it also makes great financial and environmental sense.

But you also need to ensure the rainwater you store in your water tank remains clean, fresh and safe. In the past this has meant either paying a professional or attempting the difficult task of cleaning it yourself. Until now....

Introducing the permanent, hassle-free alternative – TankVac®!

TankVac® will flush out the harmful sludge from the base of your tank!

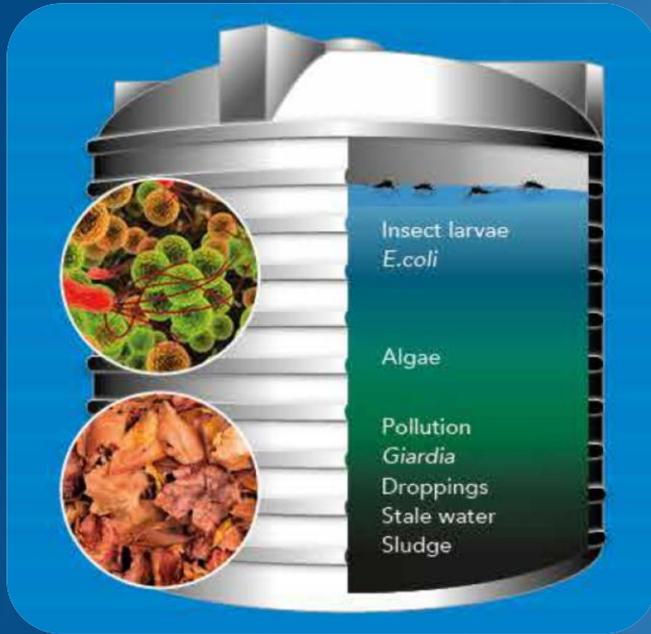


TankVac® is the invention of
Lois Agnew a New Zealand
grandmother .

Tankvac causes full water tanks
to overflow FROM THE BASE.

This unique patented system was developed in
New Zealand, tested and proven at the School
of Engineering, University of Waikato in
collaboration with microbiologists from
Auckland University of Technology.

Why do you need TankVac®?



Maintaining the quality of your stored rainwater is a never-ending challenge.

Even with a leaf gutter catcher, plant material, waste and sediment still accumulate at the bottom of the tank, creating a layer of sludge – a breeding ground for bacteria including *E.coli*, *Giardia* and *Cryptosporidium gravitate* to the tank floor.

These bacteria are dangerous to your family's well-being. They can cause vomiting, stomach cramps, diarrhoea and other serious health issues.

If these microbes live in your water tank, you can attempt to filter them out at the tap. However, **only** the microbes' outer membranes are collected – the rest of the harmful bacteria will still flow through into your body!

E.coli and water quality.

E.coli are an organism which is used as an indicator of faecal contamination of water. *E.coli* originate in the gut of warm blooded animals. When these organisms are washed into a tank they can only survive when there is a constant stream of nutrients being produced by bacterial colonies which form on the sediment at the tank floor.

What does TankVac® do?

TankVac® is a self-cleaning system for your water tank.

When a standard water tank overflows, the excess water drains from the top of the tank. Unfortunately this means it's the fresh, richly oxygenated water, which is discharged to waste.

TankVac® takes the flow of discharge water from the tank floor creating a powerful vacuum whenever your tank overflows.

This vacuum siphons the waste water from the base of the water tank, drawing in and discharging it in such a powerful flow that the harmful sediment, bacterial colonies and poor quality water are all pulled into the discharge pipe.

As the wastewater is purged from the water tank, it also takes with it the organic materials that settle and grow on the bottom of your tank.

LEAVING

No smells, no harmful bacteria –
just fresh, sparkling rainwater!

Is TankVac® cost-effective?

By replacing the need for frequent, costly professional tank cleaning TankVac® will virtually pay for itself as soon as it is installed!

TankVac® can potentially extend the life of your filtration system which will no longer be subjected to a constant stream of finely-ground waste materials.

Is TankVac® easy to install?

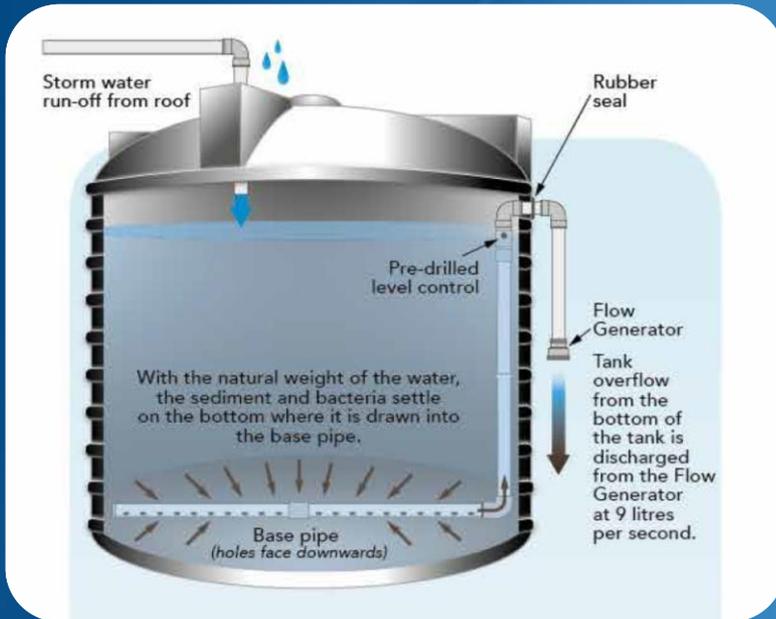
TankVac® can be easily fitted by any DIY handyman. It can be retro-fitted to your full or empty existing water tank or installed with your new tank.

This unique system has no movable parts and operates automatically **WITHOUT** the need for power. Standard Tankvac units can be fitted to tanks from 1000l to 30,000l.

How does TankVac® work?

1

TankVac® automatically starts as soon as the water level reaches the top of the tank.



TankVac uses a patented Flow Generator which removes air from the pipe carrying the overflow water

How does TankVac® work?



TankVac® begins to suck waste from the base of the tank.

By automatically creating a vacuum, the siphon effect begins.

This powerful vacuum increases water flow three-fold, drawing out sludge like a fire hose-type jet at a rate of up to 9 litres per second.

The base pipe drawing out the wastewater has been designed to create an even vacuum action across the entire base of the tank.

How does TankVac® work?

3

Suction stops as soon as the water level drops to the pre-set drilled 'level control' holes.

The siphoning action ceases as soon as the water level drops to the air holes placed 25mm below the 'full' water level. If the rain keeps falling the tank fills and the system begins the flushing action again and again.

TankVac® in operation



This has been a presentation for



The ultimate self-cleaning system for every water tank.

www.tankvac.co.nz

0800 826 582

New Zealand Patents 511142 and 542769