



**NEW ZEALAND'S
MOST ECO-FRIENDLY
WASTEWATER
TREATMENT SYSTEM**

Biolytix[®] 
Wastewater Naturally

MULTIPOD

**TWO-TANK SYSTEM
FOR LARGER HOMES**

10 REASONS WHY YOU SHOULD CHOOSE THE BIOLYTIX MULTIPOD

REASON 1

The Biolytix is an 'ecosystem in a tank' which treats the wastewater without needing costly large mechanical aerators to run, repair or replace. This results in up to 90% less energy being consumed than in most aerated sewage treatment systems thereby reducing electricity costs.

REASON 4

Silent operation. There are no noisy blowers or pumps that can run up to 24 hours every day on other systems.

REASON 8

Small Carbon Footprint. Negligible methane emissions (which has a global warming potential of more than 30 times CO₂).

REASON 5

Absolutely no offensive smells due to the fact that the Biolytix uses an aerobic process with no septic tank and no large blowers.

REASON 9

100% New Zealand made by a New Zealand owned company.

REASON 2

Unlike aerated systems the Biolytix has no smelly septic tank.

REASON 6

Independently tested in New Zealand and Council approved.

REASON 10

The most compact, light weight wastewater system on the market. Manufactured from 100% recycled material. Less weight and volume to transport. Ideal for sites with difficult access. Less excavation and less disruption to your landscape.

REASON 3

Recommended servicing every 9 months which is much less frequent than other systems on the market.

REASON 7

Treated wastewater beneficially irrigates lawns and gardens via specialised irrigation incorporating patented technologies for reliability.

HOW THE BIOLYTIX MULTIPOD WORKS

Biolytix Ltd owns the award winning patent for the Biolytic Filtration Process. This process cleverly mimics nature and turns the problem (the solid waste) into the solution (the humus that cleanses the wastewater as it trickles through it).

EMPLOYS NATURE TO DO THE WORK

Why use high energy machines when nature can do the work for us?

The Biolytix MultiPod is engineered to meet the needs of billions of hard working organisms that treat the wastewater so that it provides:

- A stable environment to live in
- Food as they would naturally find it
- An abundance of oxygen

With these ideal conditions the biolytic organisms can concentrate on what they do best – continually processing solids waste into humus.

The treatment process has no expensive moving parts to service and repair – the organisms simply breed and replenish themselves.

HARNESS THE ENERGY IN YOUR WASTE

Like solar power, Biolytix is leading the way in using nature's energy. The MultiPod harnesses the energy in the waste (including the sewage, toilet paper and food waste) to feed the organisms that break down the waste.

Rather than using high energy machines – it uses the energy in your waste to operate.

In contrast to what is found in nature, mechanical wastewater systems are water-based. To drive decomposition in this oxygen-poor environment, they must use energy-intensive aerators to pump oxygen into the wastewater. Even so, only a few parts per million of oxygen is available to the process.

By comparison, in the MultiPod worms and other biolytic organisms can draw oxygen directly from the 21% available in the ambient air.

- In a conventional wastewater system often less than 5 parts per million of oxygen is available
- In a Biolytix wastewater system around 210,000 parts per million of oxygen available

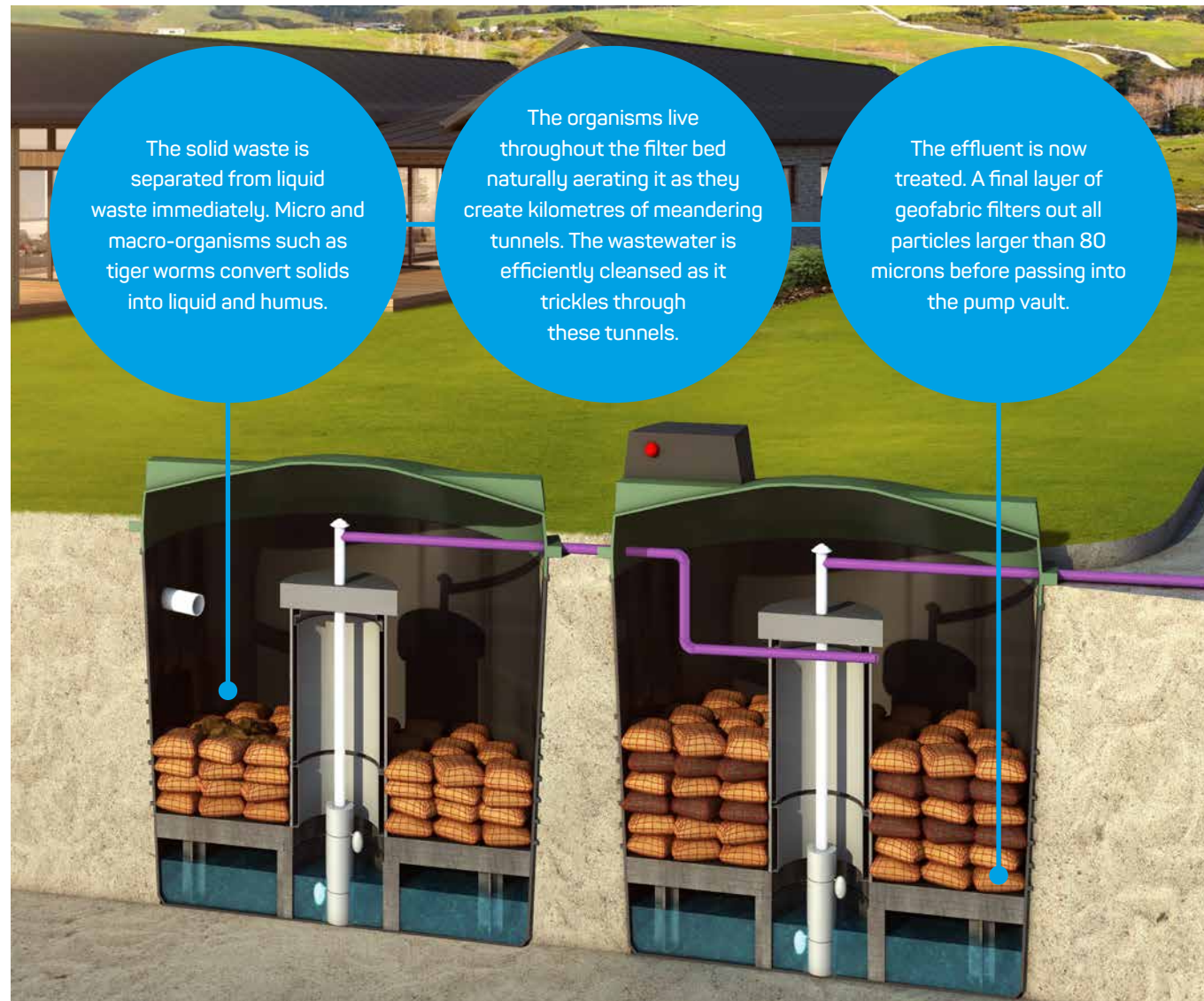
**IN A MECHANICAL SYSTEM... MACHINERY WORKS HARD.
IN A BIOLYTIX SYSTEM... NATURE WORKS HARD.**

"EVERY PARTICLE OF EARTH FORMING THE BED FROM WHICH THE TURF IN OLD PASTURE LAND SPRINGS, HAS PASSED THROUGH THE INTESTINES OF WORMS."

Charles Darwin

BIOLYTIX TICKS ALL THE BOXES: TECHNOLOGY ✓ GREEN ✓ SAVINGS ✓

HOW THE BIOLYTIX MULTIPOD WORKS



THE BIOLYTIX MULTIPOD

BIOLYTIX CAREFULLY RESEARCHED THE REASONS FOR THE PROBLEMS AND HIGH OPERATING COSTS OF AERATED WASTEWATER SYSTEMS AND DEVELOPED A TOTALLY NEW WAY OF TREATING WASTEWATER.

The result is the MultiPod, a two-tank "ecosystem" made up of an EcoPod and BioPod, specifically designed to process wastewater from larger homes. From the outset the MultiPod was engineered to be robust and built to last. It eliminates the mechanical complexity and problems of conventional wastewater systems, significantly reducing the running costs and without compromising on the quality of the treated effluent.

The MultiPod treats all household wastewater to a level that is suitable for land disposal via irrigation of gardens, lawns and bush. The MultiPod is contained in two lightweight injection moulded polypropylene tanks. It is the most compact biological wastewater treatment process in the world making it easier to transport and install.

The first tank (EcoPod) receives all household wastewater via standard gravity drainage. The tank contains plastic treatment media which acts as a roughing filter, reducing the solids and organic loading to the second tank. Larger solids are captured and broken down in the filter bed, with smaller particles and soluble organic waste filtering through to the underdrain. A submersible recycle pump located in the bottom of the first tank distributes the primary treated effluent to the top of the second tank.

The second tank is a standard BioPod and consists of alternating layers of drainage elements and organic elements. The filter bed drains into the underdrain and central pump well, from where the effluent is pumped using a submersible pump to a land dispersal system.

The media in both tanks supports the organisms that quickly convert sewage into humus. Macro-organisms including worms ensure the solids are managed and the filter bed is naturally aerated to avoid the smells associated with other wastewater systems.

The MultiPod is essentially an advanced Trickling Filter process with Tiger Worms (*Eisenia Fetida*) added to enhance the reduction of solids in the filter. The tiger worms are at the top of the food chain in a MultiPod but all the other micro-organisms typically expected in a wastewater treatment process are also present to assist with the breakdown of organic waste.

MultiPods are equipped with an audible and visual alarm to alert the home occupier to an irregularity within the system that may require a service technician.

MultiPods are supplied with customisable irrigation kits to disperse the secondary treated effluent to land via pressure compensating dripline irrigation. Treated effluent is evenly distributed to the aerobic topsoil layer to further polish the effluent and complete the treatment process. The highly treated effluent from the MultiPod provides a valuable resource for irrigating bush, gardens and lawns.

TIGER WORMS AT WORK

When the raw sewage arrives in the Biolytix tank the Tiger Worms get to work quickly. They are one of the strongest creatures for their bodyweight, and continually break up the sewage, creating millions of aerobic channels. The tiger worms quickly turn the sewage in to humus. The wastewater is then cleansed as it trickles through the many channels in the humus. The Biolytix worms have helped turn the problem – the solid sewage, into the solution – the humus that filters the wastewater.

WORMS AT WORK INSIDE A BIOLYTIX TANK

To show you how effectively the worms work in a Biolytix tank - we filmed inside one! The worms break down the solid waste in just 60 hours. The breakdown has been sped up to just 15 seconds with time-lapse photography.

Please be aware: 'POO-CAM' is rated PG (Pretty Gruesome) and we recommend you do not watch it before dinner!



**TO VIEW 'POO-CAM' VISIT:
[BIOLYTIX.COM/POO-CAM](https://www.biolytix.com/poo-cam)**

**DID YOU KNOW?
WORMS EAT THEIR OWN
BODY WEIGHT IN WASTE
EVERY DAY**



ENVIRONMENTALLY RESPONSIBLE

PURCHASING A BIOLYTIX MULTIPOD MAY BE THE MOST IMPORTANT HOUSEHOLD ITEM YOU CAN BUY TO REDUCE YOUR CARBON FOOTPRINT.

The life cycle advantages of the Biolytix MultiPod are:

- An electricity consumption of approximately 90% less than conventional aerated wastewater systems with the associated economic and environmental advantages
- Minimal greenhouse gas production as degradation is by natural aerobic processes. Septic systems are major methane emitters
- Natural aerobic degradation process with minimal sludge accumulation
- Reduced maintenance requirement and costs with a recommended service every 9 months. Removal of accumulated non biodegradable solids along with excess humus is typically undertaken by the service technician at this visit
- The high strength injection moulded tanks are manufactured from 100% recycled material and are not susceptible to concrete corrosion often evident in septic environments. Being lightweight the tanks are more easily transported and installed
- A highly treated effluent is able to be reused for beneficial irrigation of gardens, bush and lawns

BIOLYTIX TRIALS

THE BIOLYTIX MULTIPOD HAS EXCELLED IN INDEPENDENT TRIALS:

BF8 FILTER EFFLUENT QUALITY (Mean data from OSET NTP Trial 12, 2016/2017)	
Parameter	Result
Biochemical Oxygen Demand (BOD)	<5mg/L
Total Suspended Solids (TSS)	<5mg/L



CONTACT BIOLYTIX

PHONE

0800 700 818

EMAIL

info@biolytix.com

POST

PO Box 12499, Penrose
Auckland 1642, New Zealand

FACEBOOK

facebook.com/biolytixlimited



"ONE OUTSTANDING ASPECT OF THIS SYSTEM WAS ITS LOW ELECTRICITY USAGE. IT USED AS LITTLE AS 5% OR LESS OF THE ELECTRICITY OF SOME OTHER SYSTEMS MEASURED."

Environment Bay of Plenty Environmental Discharge Performance Appraisal (May 2007)

"WORMS ARE THE INTESTINES OF THE EARTH."

Aristotle



**AUSTRALASIA'S
MOST AWARDED
WASTEWATER
SYSTEM.**

**AFTER 2.1 BILLION YEARS
OF RESEARCH AND
DEVELOPMENT...
NATURE HAS THE ANSWER**