More about Biolytix

The preferred option includes the use of Biolytix tanks instead of grinder pumps for Rotoiti. They would be used to connect the household wastewater to the sewerage system. A trial will be done of Biolytix units and if that is successful, they will be used at Rotoiti. Otherwise grinder pumps will be used there, as at Rotoma.

Biolytix units are usually used for single households and connected to a drainage field or sump on the property. Inclusion of Biolytix units in a community sewerage scheme is an innovation so a trial is being held to reduce risk.

Biolytix units comprise a tank containing filters, humus, tiger worms and a pump. They provide partial wastewater treatment by breaking down most of the solids and removing some of the nutrients (nitrogen and phosphorus compounds). The outflow from Biolytix units looks reasonably clear.

The Biolytix units are very similar in appearance to the grinder pumps but a little larger and consist of an underground circular plastic tank with an exposed cover. The visible lid is slightly larger than the grinder pumps at 1.8m diameter. As with grinder pumps the Biolytix tanks will be located close to the existing septic tank on the property.

The Biolytix units will be connected to the household power supply and the power used would be paid by the householder, as with the grinder pumps. They are, however, low electricity users.

Council will own and maintain the Biolytix units as part of the wastewater system.

Below is some further information explaining how Biolytix works:

**Biolytix wastewater system**

**How the treatment bed works**

Solid and liquid waste are quickly separated. Macro-organisms like worms move in and convert the solids into humus.

The organisms live in the humus, aerating it as they create tunnels. The wastewater is cleansed as it trickles through these tunnels.

The effluent is now treated. A geofrabic layer filters out all particles larger than 80 microns.
LOWER RUNNING COSTS

Low power costs: Uses up to 90% less electricity than most other systems

Low parts costs: Has fewer moving parts to replace

Low servicing costs: Using natural design principles means improved performance. After testing, regulatory authorities in Australia and New Zealand have approved Biolytix for once-only annual servicing.

BENEFITS FOR HOUSEHOLDS

- Reduced maintenance costs (requires only one annual service)
- Low power costs (average $20 a year)
- Silent operation
- No chemical disinfection
- No odour
- No grease trap needed
- Handles peak and trough loading
- Approved for use with in-sink waste disposal
- Single compact tank – low land/visual impact

CONVERTS THE PROBLEM INTO THE SOLUTION

Biolytix immediately separates the solid organic matter and organisms break down the waste, converting it into humus.

The humus acts as a filter to cleanse the wastewater – 450 square kilometres of filter surface per cubic metre.
Easy to handle and transport

Convenient to install in tight spaces