



## Wastewater News for Lifestyle Blocks & Rural Houses



A malfunctioning sewage system can really put a smell up your nose and what's the point of having a million dollar house if the smell puts the damper on your BBQ.

Getting Dave to visit your site, evaluate the conditions and present a feasibility report on the most cost effective sewage system option represents good value for money.

It certainly makes more sense than installing a cheap system that doesn't work, and having to dig it out and do it all again.

## House & Garden at Aokautere - Palmerston North

When the owners built their dream home on the banks of the Manawatu River they wanted a sewage treatment system that would fully treat the sewage, not have any smells and not detract from the enjoyment of their lifestyle section. Dave was recommended by their architect and designed a natural Packed Bed Reactor (PBR) which blends in with the landscaping.

The treatment plant is incorporated into the lawn and can be mowed over with the ride-on mower without problem. The treated effluent was of such good quality it was able to be irrigated, out of site, around the swimming pool and surrounding gardens. This house has also featured in NZ House and Garden magazine.



### Sewage system advice saves Wellington rural owner

After many years of faithful service the traditional septic tank system serving this delightful rural property gave up the ghost and needed replacing.



The owner received advice and quotations from plumbers for sewage treatment systems, the costs of which caused her some alarm.

She rang Dave for advice and after a site visit and soil analysis he found that a septic tank upgrade was all that was required.



The section was very large with bushy areas and the soil type was more than suitable for septic tank effluent and so a treatment plant was not required.

All too often plumbers simply recommend 'their' sewage system instead of assessing the property to see if one is actually required.

# LifeStyle



## Large Homes Replace Holiday Baches on the Kapiti Coast

When a weekend bach is replaced with a large full occupancy house finding sufficient area for effluent disposal can prove difficult.

Dave was asked by the architect to come up with a solution to the lack of available area on the Paekakariki site above.

Once the new house, driveway, turning areas and outdoor living area's were designed, there was little area left for effluent disposal.

Dave designed an advanced sewage treatment and disposal system that only took up a strip of land alongside the driveway.

The living areas were not affected and the new owners are very happy with the result.

## Failing Sewage System threatens enjoyment of retirement paradise

After working hard all their lives this couple simply wanted to enjoy their days and visits from their children and grandchildren. However when the old septic tank packed up they were faced with an expensive packaged sewage treatment system as a replacement.

Having seen and heard of horror stories from others in the community who had gone down this path, and being pressured by council and system agents that 'their system was the best', they contacted Dave who is totally independent and can offer practical advice.

Dave analysed the council

requirements and the soil type and reviewed the system quotations the couple had received. He pointed out deficiencies in the proposals and designed a practical system that met the council requirements, didn't cost the earth and quietly coped with the extra loading when the extended family came to visit.



Hawkes Bay



## Bay of Islands small section, restricted area



This idyllic seaside property overlooks the bay with an oyster farm just off shore. The property has two dwellings, garaging, driveway and carparks and very little area for outdoor living and effluent disposal.

During the holidays the place overflows with people and the septic tank system simply could not cope. Effluent spills out onto the ground and puts a damper on everyones enjoyment, not to mention the health of the oysters in the bay. There appeared to be no solution to the problem.

The home stay next door had experienced similar problems and had installed an expensive aerated system which didn't cope with the holiday loads either.

The owner heard about Dave's reputation as a sewage system expert and engaged him to visit the site and advise on a solution.

Dave quickly assessed the situation and designed a treatment system that incorporated the existing septic tank and house drainage and also took care of the peak holiday loads.

# Research and Experience

Dave has over 40 years of practical and design experience in evaluating soil conditions (soil mechanics) and sewage treatment system processes and is able to advise on and design the most appropriate sewage treatment system for almost any site and conditions.

He is a leading authority on advanced septic tank, sewage treatment and effluent management systems. Dave's knowledge in this field has resulted in him being invited to address national conferences and assist government departments.

He has been invited to present papers to:

- **Building Officials Institute of NZ (BOINZ)**  
– domestic sewage system processes, performance & disposal methods
- **LTC/Water NZ (WNZ) National Conference \***  
– analysis of domestic sewage system performance
- **Water NZ National Conference \***  
– on community sewage systems
- **Land Treatment Collective (LTC) National Conference \***  
– on peak load storage and treatment systems for camping grounds, marae, school & community halls

He has also worked with the following organisations on waste water issues, including:

- **Consumers' Institute**
- **Ministry for the Environment**
- **NZ Surveyor**
- **NZ School Trustees Association**
- **Countrywide Magazine**
- **Horizons Regional Council, and various other councils**



**Smelly black sludge or clean treated effluent, which do you want in your back yard!**

\*Note: LTC - Land Treatment Collective, NZWWA - Water New Zealand  
\*WNZ and LTC are national organisations comprising government departments (i.e. health, environment etc), regional and local councils, scientists, researchers and engineers'.



## Not all sewage systems are equal

With council tests over 10 years showing 65% of sewage treatment systems failing it is timely to remind homeowners and architects how important it is to obtain independent sewage system advice before committing to a brand of sewage system.

Some systems are cheaper to buy but can end up costing 3 times the purchase price just to keep operating over 20 years or so.

Some systems cost \$40 a month for power while others only use \$4 a month, some cause problems when owners go away or visitors arrive, some cannot handle insinkers while others cannot handle weekend washing loads.

There is no training in the plumbing apprenticeship on evaluating sewage systems and most plumbers cannot give objective advice and simply sell clients 'their' brand of system.

The advantages of obtaining Dave's services include;

- Dave is an independent Environmental Engineer who will advise on the most appropriate and cost efficient sewage system for your site and conditions.
- Dave has 40 years specialised experience in this field and is nationally known for his expertise.
- Dave understands Council regulations and requirements.
- Dave has worked with Regional and Local councils throughout NZ.
- **It is cost-effective to obtain Dave's independent advice.**

It costs thousands of dollars to install a sewage system and even more to dig it out and do it again - Why take the risk?

# LifeStyle

## Nationwide Projects

This map shows some of Dave's larger wastewater projects around New Zealand



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