

## Rural Café odours get up neighbours' noses



A brand new purpose built rural café in a beach setting proved to be a great success with locals and passers by filling the café seven days a week.

Unfortunately the owner accepted the local plumber's 'free' advice on which sewage system to use. When the café is operating an offensive sewage system odour wafts into neighbouring properties kitchen and dining room areas making cooking and eating food

almost impossible.

The local council has issued a notice to the café to rectify the situation which could cost much more than the original sewage system itself.

This problem could have been avoided if the owner had obtained independent advice rather than rely on the local plumber who was the agent for a low cost sewage system brand.

## Factories require specialist designs



When large rural factories, employing between 150 - 300 people require a sewage system design it pays to call in the expert.



Fonterra Mania (Taranaki), Holcim Cement (Westport) and Crusader Meats (Bennydale - Te Kuiti) all contacted Dave Miller to upgrade their sewage systems.



“Independent sewage system advice doesn't cost - it pays!”

Dave Miller  
Environmental Engineer

### Can you afford the cost of 'free' sewage advice?

'Free' advice from plumbers and sewage system agents has resulted in a number of inappropriate sewage systems being installed, often at great cost to the owners.

There is no sewage treatment system training in the plumbing apprenticeship and plumbers are not always the right people to ask for sewage system advice. At best they may have a sales pitch from the sewage system manufacture, whose system they sell and install but that would be about it.

It costs thousands of dollars to install a sewage system and even more to dig it out and replace it - so why take the risk?



### Website Upgrade

Check out the Dave Miller website, containing regularly updated samples and design philosophies for specific building requirements. For lifestyle blocks, schools, rural restaurants, cafés, marae, community and school halls.

[www.davemiller.co.nz](http://www.davemiller.co.nz)





## Sewage System advice saves 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 me for advice and after a site visit and soil analysis i found that a septic tank upgrade was all that was required.



The section was very large with bushed 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.

# Whakarongo School A sewage system that works



## School extensions & community hall with a sewage system that keeps the children safe

When Whakarongo School in the Manawatu was being extended, with the addition of a community hall, the school asked Dave to assess sewage system options and advise on the most appropriate and cost efficient system for the school.

After visiting the site and undertaking soil tests Dave advised an advanced sewage system that could consistently fully treat the school and hall sewage,

cater for increases in the roll and hall use and have low running and maintenance costs.

The sewage system has been up and running for over 7 years with no problems being reported. Obtaining independent advice on the sewage system ensured the system worked, the pupils health was protected and the school only paid for the system once.

## School system failure causes pupils sickness



### Effluent ponding along school boundary

A large rural school had recently spent \$50,000 on a new sewage system, on the advice of a local plumber, which began to cause problems after only one year.

Effluent ponding along the school boundary, and in areas where schoolchildren had access, caused cases of gastroenteritis at the school and the intervention of the Ministries of Education and Health.

I was called in to advise the Ministry of Education on how to remedy the situation. Fortunately there was a solution. However it cost the school another \$50,000.

The money would have been better spent on school education items rather than fixing up an inappropriate sewage system that suited the local plumber to install.

# Research and Experience

Dave has over 37 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)**  
– sewage system processes, performance & disposal methods
- **LTC/NZWWA National Conference**  
– analysis of sewage system performance
- **NZWWA National Conference**  
– on community sewage systems
- **LTC National Conference**  
– on peak load storage and treatment systems (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**
- **Horizons Regional Council, and various other councils**



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



## Not all sewage systems are equal

With tougher consent requirements for rural and lifestyle landowners now in place, it is timely to remind homeowners, architects and their consultants when building how important it is to get good sewage system advice and plans.

For example some systems power costs are \$40 - \$60 per month while others can cost \$4 - \$6, some cause problems when owners go away or visitors arrive, some need to have the treatment media 'reconstructed' after 5-7 years at a large four figure cost, some cannot have insinkerators fitted while some cannot handle weekend washing loads.

In addition the NZ Standard requires treated effluent discharges to meet certain treatment levels.

Some plumbers are simply selling their treatment system to the client rather than assessing their requirements. In some cases clients are being told they must have a sewage treatment system when an improved septic tank system would be quite acceptable.

As an independent Environmental Engineer I do not promote or favour the use of one particular brand, product or system. I work independently to determine the best sewage system for the individual situation, and will recommend the most cost-effective system to suit the dwelling and situation.

- I am totally independent.
- Experienced & specialised – 37 plus years knowledge, I am the local expert in this field.
- Understand Regional Council regulations well and other LTA requirements.
- I have worked successfully with Local Govt, Councils and Regional Councils throughout NZ.
- Can highlight the potential pitfalls of using inferior or untested systems.
- It is cost-effective to obtain my independent advice.





# Nationwide Projects

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



**Restaurants & Adventure Tourist Facilities**

**Mokai Bungy: Taihape**  
Restaurant and facility

**River Valley: Rangitikei**  
Whitewater rafting.  
Lodge and restaurant

**Flat Hills: Rangitikei**  
Roadside bus stop restaurant

**Waterford Café: Manawatu**  
Pohangina Valley



**Schools**

**Apiti School:** Manawatu

**Aroua School:** Taranaki

**Ngaere School:** Taranaki

**Turakina School:** Wanganui

**Aokautere School:** Manawatu

**Whakarongo School:** Manawatu

**Hukarere College:** Hawkes Bay

**Flemington School:** Hawkes Bay

**St Joseph's School:** Taihape


**Newbury School:** Manawatu

**Kai iwi School:** Wanganui

**South Makirikiri School:** Marton

**Bridge Pa School:** Hawke's Bay

**Ngati Rangi Kura:** Ohakune



**Subdivisions**

**Bombay:** 3 x 50-section cluster development

**Taranaki:** Sewage upgrade assessment for 45-section subdivision

**Huinui:** 6-section subdivision

**Karamea:** 26-section eco subdivison


**Westport:** Cluster sewage system for 10 houses

**Cape Foulwind:** Sewage design concepts for 100-section subdivision

**Bay of Plenty:** 42-section Eco Village-sewage design concept

**Napier:** 7-section subdivision on beachfront

**Lake Wairarapa:** 5-section subdivision on lake edge




**Rural Factories with 150+ staff**

**Fonterra:** Manaia, Taranaki

**Crusader Meats:** Bennydale, Te Kuiti

**Holcim Cement:** Westport



**Maraes**

**Kaitumutumu:** Huntly


**Te Tikanga:** Halcombe, Manawatu

**Te Kauwhata:** Manawatu

**Moawhango:** Taihape

**Rongomaraeroa:** Poraongoahau, Hawkes Bay

**Waimakariri:** Cambridge



**Community Halls**

**Flemington:** Central Hawkes Bay

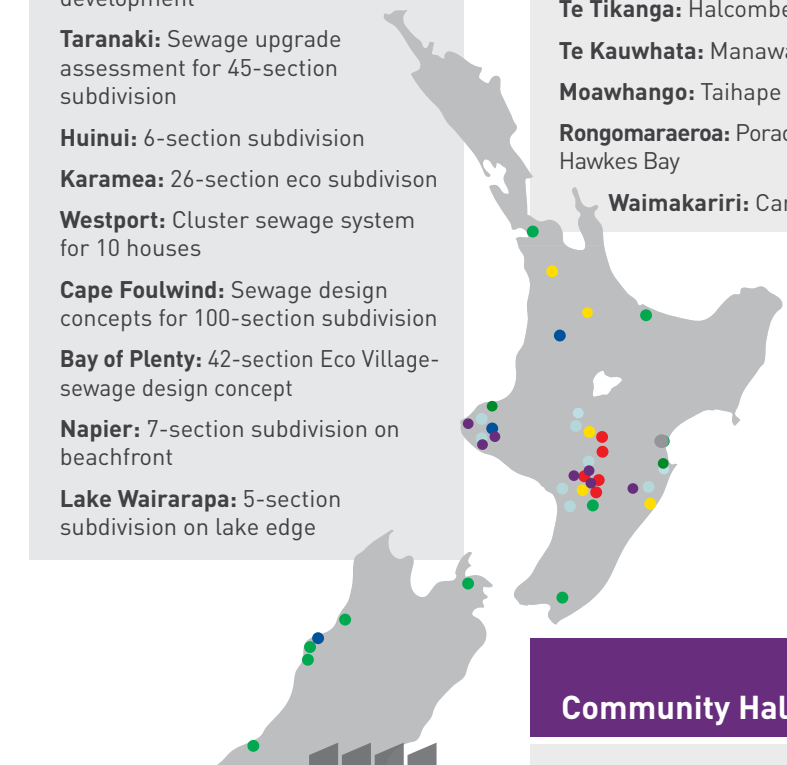
**Aokautere:** Manawatu

**Ngaere:** Taranaki

**Newbury:** Manawatu

**Okato Community Hall:** Taranaki

**Whakarongo:** Manawatu



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