



 **Environmenttechnology**

On-site wastewater treatment

No power  
No servicing  
20yr warranty



03 970 7979  
[www.et.kiwi.nz](http://www.et.kiwi.nz)

  
"Always The First Option"

[Website](#)

[AES Certification Course](#)

[Like us on Facebook](#)

## Happy New Year!

Here's some more information on the Advanced Enviro-Septic (AES) Wastewater Treatment System.

AES was developed in the US where it has been in use for over 25 years and 250,000 installations. It has also been in use in Australia for several years. This year, Queensland became the 2nd state after Tasmania to issue accreditation for the Advanced Secondary System. This means the system is no longer an Alternate Solution but a standard application ([click here for further details](#)).



Thanks for all the designs we received last year.

When it's installation time:

**Please remember  
the couplings  
go on the inside  
of the fabric.**

## New approvals and installations in New Zealand

In New Zealand, Kapiti Coast District Council became the latest authority to consent an AES system, expected to be installed in Te Horo within the next couple of months. Previously Central Hawke's Bay District Council and ECAN were the latest to accept the system, with an installation already in Waipukurau and another system already installed in Ashburton. Talks with Auckland Council are ongoing: They have recently tendered for the job of re-writing Technical Publication 58 – On-site wastewater systems: design & management manual; alternative rules to the Aus/NZ Standards 1547.

## From the office

Environment Technology has expanded to include



Hazel Clemens who has a Degree in Biology with an endorsement in Environmental Science. She will be pitching in with all aspects within the office and researching existing and future applications of AES systems to commercial and industrial wastewater treatment – wineries, honey processing... Hazel joins co-directors Dick Lamb and Hazel Pearson and marketing manager Siân Clement.

Running total of AES installed in NZ = 34

## AES Sand

This is an endless topic of conversation for some of us. For example, we have a 3mm washed sand and a 6mm washed sand available at a local sand supplier and both pass the Spec-Check test for AES sand. So which way do we lean – towards the coarser or the finer? As a lot of the filtering aspect takes place in the biofilm that builds up in the fabric layers of the AES pipes we took a look at the wicking ability of various sands and found the sand that was well out of spec on the coarse side - >40% greater than 4mm – performed much better than the sand just out of spec on the too fine side – less than 40% greater than 0.5mm. The results can also be found [here](#).



*Too fine*



*Too coarse*



*Just right - AES system sand*



If you would like to undertake your own testing instead of sending sand samples to us, Spec-check kits can be purchased from Environment Technology at a cost of \$300 plus gst

## INTERNATIONAL NEWS OF INTEREST

Scientists have found antibiotic-resistant superbugs during tests on a river in Coventry, UK.

The drug-resistant bugs were found in the River Sowe near the Finham sewage treatment works in samples taken by experts from the University of Warwick.



Researchers believe sewage treatment plants are unwittingly helping to spread antibiotic resistance due to so many different types of bacteria coming together that it gives them the perfect opportunity to swap genes, allowing antibiotic-resistant bacteria to evolve much faster than they would in isolation.

Comments study leader Professor Elizabeth Wellington: "We're on the brink of Armageddon and this is just contributing to it. Antibiotics could just stop working." Professor Wellington, along with colleagues from Warwick and Birmingham universities and the Health Protection Agency, analysed sediment samples from upstream and downstream. They found bacteria resistant to important antibiotics used to treat a range of problems, including meningitis, septicaemia, and so-called hospital-acquired infections. Resistant E. coli was also found and was seven times more common downstream of a UK sewage plant than upstream. The researchers say stricter regulations and higher levels of treatment are needed to halt the rise in antibiotic resistance in the environment.

If you don't wish to receive our newsletters: [Unsubscribe](#).  
Having trouble viewing this email? [View it in your browser](#)



**Back to the Future Wastewater Treatment**