

RICHARD FLYNN FLYNN & SHAW, CERTIFIED SITE ASSESSOR



KELLY GALLOWAY DYNAMIC MONITORS. CANADA

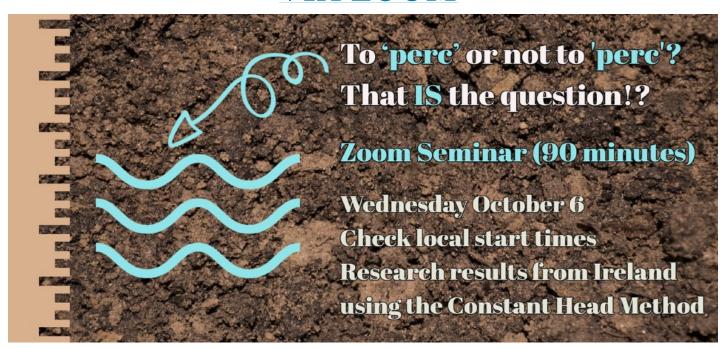


LAURENCE GILL
PROFESSOR TRINITY
COLLEGE DUBLIN



JIM KELLY ARRIS PTY. URRBRAE, SOUTH AUSTRALIA

## REGISTER HERE FOR THIS SEMINAR VIA ZOOM

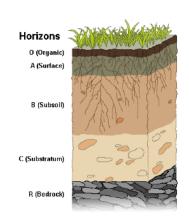


## To 'perc' or not to 'perc'? Zoom Seminar October 6, 9-11 AM PT.(includes time for Q&A)

If you are involved in the onsite wastewater professions, either as a designer, installer, inspector or regulator, the infamous 'Perc' test can be the proverbial thorn in your \*\*\*\*\*\*!

Most onsite sewage systems rely on soil as a receiving media to perform treatment and allow infiltration for water recycling. For better or worse, many soil absorption systems (SAS) are sized based on their infiltration capacity with clean water - referred to as the "Perc Rate".

But not all soils are perfect and not all soils are equal when it comes to good treatment capacity and capability. For better or worse, many systems are governed by how well these soils perform measured by the 'perc' test.



## What are the choices?

Perc Rate is determined by measuring how long it takes for water to drop a particular distance in the perc test hole. Some jurisdictions require presoaking the test hole and some do not. The exact procedure varies considerably throughout the world including the US. As a result, the Perc Rate is subject to the soil conditions at the time of the test and the specific hole dimensions, water depth, etc.

Due to these shortcomings, many codes and practitioners are instead advocating for measurement of soil *field saturated hydraulic conductivity* (*Kfs*) or *permeability* for short. Permeability/Kfs is a true soil property unlike Perc Rate. For most sandy and loamy soils, permeability tests can be completed in a fraction of the time as percolation tests.

Many jurisdictions question the accuracy of a percolation test to assess the treatment quality of soil and instead rely on an analysis performed by a soil scientist. Is there a benefit to making soil infiltration testing part of the site evaluation process? What sort of qualifications and training are necessary to be able to conduct permeability tests properly?

In this October 6 Zoom seminar you will hear about the research and experiences of industry and academic personnel from Canada, the Republic of Ireland and Australia. You will also learn about their evaluation of percolation test alternatives . REGISTER HERE.

## **Speakers**

Richard Flynn. BEng, CEng, CEnv, C.WEM, C. Build E FCABE, MIEI, MCIWEM, FIET, MIEnvSc, FIMS (dip. IMS), PEng, FIPWS. And Wastewater Education 501(c)3 Board of Directors Richard is a Certified Site Assessor has been the Chairman of the <u>Irish</u> Onsite Wastewater Association since 2014.

**Kelly Galloway, P.Eng.**, is a Civil Engineer with over 25 years experience, 20 years with her own consulting firm, Engineering Technologies Canada Ltd. (ETC). Kelly is the recipient of multiple awards for excellence in engineering and sustainable design. She also developed the <a href="https://example.com/ETC Pask">ETC Pask</a> Constant Head Permeameter Kit and other products for the onsite wastewater industry.

Laurence Gill is a Professor in Environmental Engineering in the School of Engineering, Trinity College Dublin. His research includes studying the fate and transport of both air and water-borne pollutants in the natural and built environment, the development of passive treatment processes and karst hydrological catchments. His research on on-site wastewater treatment have contributed to the development of the <a href="Irish EPA's legislative Code">Irish EPA's legislative Code</a> of <a href="Practice for domestic wastewater treatment systems">Practice for domestic wastewater treatment systems</a>.

Jim Kelly <u>Director and founder of Arris</u> in 2000, a company that specializes in the sustainable use, assessment and management of recycled water and agricultural production systems. Jim is recognized as a leader in the beneficial use, compliance and approvals of waste streams and associated projects.



Wednesday October 6

<u>Check local times here</u>

<u>Hosted By</u>









