



Ontario Septic Systems & Treatment Units with Soils

Moderator(s): Andrew Wild

DATE: Monday, October 5th, 2015 TIME: 3:30 pm

LOCATION: Grand Ballroom Centre

GUEST SPEAKERS: Mr. Craig Jowett - Waterloo Biofilter Systems Inc., Mr. Brady Straw - Waterloo Biofilter Systems Inc.

DESCRIPTION: Craig Jowett Ph.D., P.Eng. & Brady Straw B.Sc, Waterloo Biofilter Systems: "Ontario Septic Systems & Treatment Units with Soils -Design, Installation, Troubleshooting" - This technical seminar will provide attendees with information on-site sewage treatment systems in OBC Part 8. Component parts of the systems are discussed within a framework of living microbial systems, ease of inspection & maintenance, and low H&S risks over the long term. Septic tanks in 8.2.2.3. provide initial digestion and we will describe how these work, how they are sized, and trouble-shooting tips. Also described is how soils or sand fill operates as sewage treatment in absorption trenches 8.7.3., raised beds 8.7.4. and Filter Beds 8.7.5., as well as filtration treatment outside the natural environment with the SB-5 units with their disposal bed options as in 8.7.6., 8.7.7., and BMEC Authorizations. Critical to successful operation is siting of the system with respect to other buildings, determining actual soil permeability, slope of adjacent properties, and choosing the right treatment option for difficult soil types such as flat clay areas. Maintenance contracts & homeowner recommendations will be emphasized.

BIOGRAPHY: Mr. Craig Jowett, Research and Development
E. Craig Jowett, Ph.D., P.Eng. - Head of Research, Waterloo Biofilter Systems Inc. is a geological engineer from University of Toronto and worked in the mining industry across Arctic Canada, central Europe and SW US. After his Ph.D. in geology-geophysics at Toronto, he was a NATO Science Fellow at University of Michigan and Cornell University, and Research Professor at University of Waterloo.

After founding the company Waterloo Biofilter Systems in 1995, he is now Head of Research since 2014.

He developed and commercialized the absorbent-medium trickle filter and the Shallow Area Bed dispersal bed for tight clay soils. Newer developments are the (a) laminar-flow WaterTube septic tank, (b) WaterNO_x nitrate removal technology, and (c) residential-scale EC-P phosphorus removal technology.

He holds more than 20 patents in the area of sewage treatment, sits on several CSA & BNQ standards committees, and has authored numerous articles in the geology and sewage treatment fields.

BIOGRAPHY: Mr. Brady Straw , Engineering Department

Brady is a graduate of the University of Guelph with a bachelor's degree in Environmental Science (Environmental Economics & Policy). As the lead onsite sewage treatment and disposal designer for Waterloo Biofilter Systems, Brady assists installers, engineers, and regulators on designs for a range of facilities; from individual houses to communal systems and large commercial facilities. Brady focuses on difficult and sensitive sites to provide the optimal treatment and disposal solution for each site. Brady is on the Board of Directors of the Ontario Onsite Wastewater Association.