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Mr. Dewayne Roadcap
Program Manager
Division of Onsite Sewage and Water
Virginia Department of Health
PO Box 2448
Richmond, VA 23218

May 29, 2009



Re: Engineer's Product Certification Statement and evaluation of O&M Manual

Dear Mr. Roadcap:

In my capacity as Director of Engineering at Quanics, I have designed, signed and sealed Bio-COIR[®] wastewater treatment systems in Virginia, Kentucky and Florida. These systems range in size from 300 gpd to 20,000 gpd. Based on the above experience and as Virginia licensed professional engineer I provide you with this certification letter. In my professional opinion, when properly designed, installed and operated to treat residential wastewater Bio-COIR systems can be expected to produce effluent at the end-of-pipe that will likely meet the treatment expectation below:

	Converted Upper Log of all Transformed Data 99-Percent Confidence Interval (99% C.I.)
BOD ₅ (mg/l)	Less than or equal to 10 mg/l
TSS (mg/l)	Less than or equal to 10 mg/l
Fecal coliforms or E.Coli (cfu/100ml)	Less than or equal to 2,000 cfu/100ml

I have also reviewed the Quanics Operation and Maintenance manual. In my professional opinion the maintenance activities that must occur during the six-month scheduled maintenance visits accurately reflect the service and maintenance needs of the typical system.

5/29/09
Sincerely,

Kevin M. Sherman, Ph.D., P.E., D. WRE
VA PE #45440
Director of Engineering
Quanics, Inc. -Engineering Water Solutions