

Old Dominion Engineering

August 11, 2009

Dwayne Roadcap
Program Manager
Virginia Department of Health
109 Governor Street, 5th Floor
Richmond, VA 23218

cc: Calvin Locker
Ecological Tanks, Inc. (Manufacturer of Aqua Safe)

Re: Aqua Safe Residential Treatment Units Effluent Performance and Operations and Maintenance Manuals

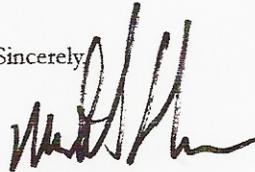
Dear Mr. Roadcap,

In my professional opinion as an engineer licensed to practice in Virginia, the Aqua Safe Residential Treatment units (for design flows $\leq 1,000$ gpd) when properly designed, installed, operated, and maintained will likely produce an end of pipe effluent quality for BOD₅ and TSS in accordance with the criteria set forth in VDH GMP 147 (geometric mean of ≤ 10 mg/l BOD₅ and ≤ 10 mg/l TSS). In order to meet VDH GMP 147 criteria for effluent fecal coliforms (geometric mean ≤ 2000 cfu/100 mL) the unit must be continuously disinfected. This assessment is based upon our experience designing and operating Aqua Safe units and reviewing available testing data from unit performance such as NSF certification and evaluation.

I have reviewed ETI's Aqua Safe Owner's Manual and Installation, Maintenance and Troubleshooting Manual for Distributors, Installers, and Maintenance Providers for Aqua Safe Residential Treatment units and the maintenance schedule appears to accurately reflect the servicing and maintenance needs of the various Aqua Safe products. In order to meet VDH reduced vertical offset requirements continuous disinfection would be required by a separate proprietary UV disinfection or chlorination unit. ETI offers a proprietary disinfection unit called the "The UV Disinfector" to be used in conjunction with their treatment units. I have reviewed ETI's UV Disinfector Installation, Operation, and Maintenance Instructions and the maintenance schedule appears to accurately reflect the servicing and maintenance needs of the unit. Other disinfection processes/units used in conjunction with Aqua Safe would require an independent operation and maintenance manual.

Please do not hesitate to call if you have any questions.

Sincerely,



Michael Craun PE