



A Professional Engineering Practice

November 5, 2009

Mr. Dwayne Roadcap
Division of Onsite Sewage and Water Services
Virginia Department of Health
109 Governor Street
Richmond, VA 23219

Re: Engineer's Product Certification Statement
Clearstream Wastewater Treatment System

Dear Mr. Roadcap,

I have analyzed the transmitted data set for the Clearstream Wastewater Treatment System in accordance with the requirements of GMP147 and hereby certify that, in my professional opinion, the treatment unit can be expected to produce effluent at the end-of-pipe that will likely meet the treatment expectations identified within the referenced policy. Based on my analysis the data set statistical results for the Upper 99% Confidence Interval for the Untransformed Log Transformed Data are as follows:

BOD5	5.44 mg/l
TSS	8.99 mg/l
Fecal Coliform (Disinfected)	109 cfu/100ml

I have also reviewed the Operation and Maintenance Manual and certify that, in my professional opinion, the manufacturer's maintenance schedule appears to accurately reflect the servicing and maintenance needs of the proprietary product.

The data presented included disinfection of the treated effluent. Therefore, it is my recommendation that disinfection be included for all disposal applications where the vertical separation distance from the point of effluent application to the soil wetness feature is less than 12 inches.

Feel free to contact me with any questions.

Sincerely,

Joel S. Pinnix, PE

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