Dear Colleagues,

While serving as the RMO in New Delhi about a decade ago I began researching alternative solutions to the hundreds of water distillers (Durastill) that the Embassy had purchased and maintained. They were an expensive nightmare to operate and service, generally resulting in two to three local employees to respond for each service call.

I eventually discovered an emerging technology for microbiological water purification that required no electricity and no maintenance, but delivered high-quality filtered water comparable to that provided by the distillers. It was an instant-demand system essentially designed to use in third-world nations. It was just beginning to undergo extreme Federal certification as an environmentally friendly system under the NSF P-231 protocol.

Some years later, when I arrived in Cairo, there was a primitive, marginally effective, on-demand water filtration system being used by the Embassy. Although the new filtration system had not yet received its certification, the Facilities Manager found the specifications compelling and placed orders that would replace all the older units.

Now some years later, this new system has finally received its certification(s), as follows:

System Highlights

· Certified by WQA (Water Quality Association) and tested to NSF/ANSI standards of P-231, NSF 42 and NSF 53.

· The #4000 system qualifies for the WQA Gold Seal Emblem. This decal can only be applied at a WQA inspected factory on the assembly line. The production facility is inspected on an annual basis.

· **The #4000 system is listed on GSA contract #GS-07F-9166S. The plan is to offer this filtration system at a significant discount off the GSA pricing for the foreseeable future.**

· **Four of these systems can be purchased in place of one distiller with a savings for each post of over $300.00 in electricity per distiller per year.**

Personally, I have used various prototypes of this filtration system at various postings since learning of it back in New Delhi, and have been very pleased with its effectiveness in filtering water, the simplicity of it use, and particularly the taste of the water it produces.

Some Details:

Testing results are verified and certified through the WQA and they exceed the NSF testing standards as follows:

Chlorine
Required Reduction ≥ 50%
Actual Reduction Results > 99.9%

Cyst
Required Reduction 3 LRV
Actual Reduction Results > 99.97%; 3.52 LRV

VIRUS
Required Reduction 4 LRV
Actual Reduction Results > 99.99%; 5.22LRV = 99.999%

BACTERIA
Required Reduction 6 LRV
Actual Reduction Results > 99.99%; 7.86LRV = 99.9999%

LEAD – 6.5 PH
Required Reduction ≤ 10 µ/L
Actual Reduction Results > 98.70

LEAD – 8.5 PH
Required Reduction ≤ 10 µ/L
Actual Reduction Results > 98.40

For those of you who have a technical bent, I have extracted the testing summary as follows (otherwise just skip to the last paragraph):

NSF/ANSI P-231 standard criteria:
Is formulated around the latest revision of the US EPA Guide Standard and Protocol for Testing Microbiological Water Purifiers. The filtration device must reject a minimum of 6 log bacteria and 4 log virus minimum. Viruses at all stages of a 10.5 day test using water that mimics typical US municipal water (6 days) and extreme water (high TOC, high TDS, high turbidity, high pH, low temp) for 4 + days. The filter is challenged with bacteria and virus at concentrations of >1% of the levels found in raw sewage.

NSF/ANSI 42 standard testing criteria:
Units are evaluated for material safety, structural integrity and accurate product literature. This standard primarily deals with particulate, chlorine removal, appearance, and taste and odor claims. Testing for chlorine was done using a 50/50 on/off cycle to whatever gallon capacity is requested. The test water is spiked to a set range. Test samples are taken in increments of 100 gallons and analyzed.

Extraction standard testing criteria:
The system is tested with and without media. After conditioning, the system is filled with water and allowed to sit/stagnate. Samples are taken for analysis. Repeat the sequence. Structural integrity, flow rates, are also tested.

NSF/ANSI 53 standard testing criteria:
Cyst testing was conducted by using 3-micron beads in the test water. The system is cycled on/off and monitored until the flow rate begins to

reduce. Sampling begins when the flow rate reduction is 25%. Another is taken at 50%; the final sample is at 75% reduction.

Lead testing:

At 2 pH levels, 6.5 and 8.5, with the same test cycle and capacity as for chlorine. The test water is spiked to a set range and samples are taken in increments and analyzed.

So, in summary, this is the best water treatment system that I have been able to find and offer. If you wish to know more, please go to www.bdavidwater.com and/or use the following personal contact information as I have a high regard for Bruce's integrity and know that he can offer a lot of information and compelling prices.

Bruce Ribnick
B. David Company
Email: Bruce.Ribnick@bdavidwater.com
Phone: 952-884-8417 X:700

BTW (Disclaimer) – Other than seeing that our Embassy and Consulate populations receive the best health-related support that can be provided, I have no personal or financial interest in this product or the company offering it.

Sincerely,

Chris

Christine Hughes, M.D.