

GREENEMAGAZINE

While you're working to save water, improve its taste, quality

For those who live in rural areas, one of the most frustrating down sides can be as simple as getting a good-tasting drink of clean, safe water. Even in communities where water is adequately treated, sulfur can ruin the taste of clean tap water. And in older buildings, the buildup of sediment over many years can reduce water pressure and bring a decidedly unpleasant result when you crave a cold drink of water.

For these readers, there is bottled water or a service that delivers a tastier product to refill the office water cooler around which much Monday morning quarterbacking and office gossip occurs.

As this Water Issue has stressed, we often take taste for granted until either circumstances or a drought can truly change the equation.

For more than three decades, Water Technology of the Ozarks (WTO) has been tapping into the demand for cleaner, better tasting water, most recently through the LINX 140 Drinking Water System (linxwater.com), which allows the homeowner filter water three different ways using ion change. The system uses replaceable LINX TDS cartridges to reduce solids such as nitrates, lead, arsenic and copper, as well as distasteful sulfur that so often make well water unpalatable. Moreover, it is adjustable to personal taste.

Along with Lakeland Laboratories and Missouri Valley Environmental, WTO is a subsidiary of Ozark International Inc., a Nixa-based company in business since 1980 that literally manages water systems, tests municipal water for smaller communities that don't have testing facilities, and even operates three private water companies. (Note: In the premier issue of GREENE, we reported on the savings the community of Highlandville achieved using WTO products that produced cleaner water as well as a 30 percent savings.)

The TDS (Total Dissolve Solid) cartridge system requires 29 times less water than reverse osmosis systems, backed by 10 years of research and more than 50 patents. To be clear, it typically takes 29 gallons to produce one treated gallon of water in some systems.

ing equipment, and WTO is a member. (Note: As with any system, there is an annual service call and filter replace to remember.)

Using reverse polarity, harmful ions are simply flushed down the drain harmlessly, a process that occurs after every three gallons of water has been produced. The proverbial red light diode flashes to signal that automatic regeneration has begun. The exchange replaces the positive hydrogen ions with negatively charged hydrogen ions. Hydrogen, of course, is the H in H₂O. Meanwhile, positive electrodes remove negatively charged chlorine and negative electrodes remove positive nitrates.

Having used (and refused) water softening technology in several communities, one of the most welcome conveniences is the system's hands-off operations. The system does not require a monthly visit from a technician loading up expensive salt pellets, nor does the homeowner have to remember to do so. In fact, the system can alert WTO if a component needs replacement, leaving one

WTO President Hollis H. Brower, better known as "Bert" to two dozen communities with whom he has relationships, has a broad range of experience with larger companies including Dow Chemical Co., Drew Chemical Corp. and Betz Laboratories. In fact, he can be said to have a passion for water quality and treatment that others may only appreciate when, shall we say, the well runs dry.

Of all Brower's long list of clients throughout the Ozarks, perhaps the most demanding is the Jordan Valley Innovation Center (JVIC) run by Missouri State University, where water for research purposes must meet measurable standards above what most of us can even imagine – and be readily available for a dozen different emerging companies.

Ion exchange uses electricity to extract dissolved solids from water as well as activated carbon to improve water quality by removing taste and odor.

For entire communities in the Ozarks, that's welcome news. For those of us who depend on deep wells lined with iron castings that produce sulphur, it's a dream come true. It's good to know that the investment has a payback. The TDS (Total Dissolve Solid) cartridge system requires 29 times less water than reverse osmosis systems, backed by 10 years of research and more than 50 patents. To be clear, it typically takes 29 gallons to produce one treated gallon of water in some systems.

But the best news comes from the Water Quality Association, which reports that even traditional gas water heaters use 29 percent less energy when using softened water, so the savings is twofold. For electric water heaters, the savings is still 21 percent compared with untreated water. It should be said that WQA exists to advocate for water softening



LINX 140 Drinking Water System

annual service call each year by a trained service technician to replace the filter. The technician accesses a performance audit of the system, and can presumably make necessary adjustments or filtration replacements.

Water Technology of the Ozarks has its own web site (watertechozk.com), which offers a more complete summary of its services. For those of us who are committed to achieving a greener lifestyle, even if only a step at a time, WTO's Rainwater Harvesting Systems is also worth exploring. The notion of a completely underground system providing water for garden irrigation, washing clothes, toilet flushing and other household uses, is increasingly attractive.

– George Freeman

If you have a product suggestion for "Let's Review," please send us an email to Editor@GREENEMagazine.us.