Greywater Recycling and Filtration Technologies

Water is too precious of a resource to use just once. With advances in technology, recycled water has become a vital resource for non-drinking purposes and provides a sustainable water source that is reliable, economically feasible, and an environmentally sensitive means to maximizing water resources.

Enterprise Ventures Corporation’s (EVC’s) water technologies purify and process greywater for non-drinking use. We address pressing water needs in multiple markets, including:

- Federal Government
- Military
- Local Government
- Institutional Laundries
- Commercial Laundries
- Mining
- Hospitality
- Higher Education
- Oil & Gas
- Manufacturing
- Temporary Installations
- Disaster Relief

EVC Offers:

- Greywater recycling technologies at the commercial scale
- Scalable, modular, portable systems that are energy efficient and low maintenance
- The ability for businesses to exist where restricted water rights, availability, or water recycling requirements normally prevent new businesses from opening or existing businesses from expanding
- Reduced water and wastewater hauling costs and risks for military and temporary installations
- Social and environmental benefits, especially in water scarce regions and disaster relief operations across the U.S. and abroad
- Membrane filtration technology, which enables benefits such as filtration path stability; reduced maintenance and operator time; instant system startup; and the ability for computer controls, continuous monitoring, and real-time adjustments.
- Technologies to promote achievement of Net-Zero water goals and mandates
- Minimal operator requirements

EVC’s Laundry Water Recycling System evolved from a system designed by its parent company, Concurrent Technologies Corporation (CTC). The original system was called SYLAS-R2® (System for Laundry and Shower Recycle/Reuse). SYLAS-R2® won a Silver Edison Award in the energy and sustainability category. Since 1987, the Edison Awards™ have recognized and honored some of the most innovative new products, services, and business leaders in the world.

EVC’s quality management systems are certified to the ISO 9001:2015 (Quality) and 14001:2015 (Environmental) standards, and to AS9100D:2016 (Quality-Aerospace-Related Products).
Innovative Water Technologies from EVC

Twin Ultra™ Greywater Recycling System

Recycles 70 to 90 percent of greywater

EVC’s Twin Ultra™ Greywater Recycling System treats greywater from laundry, sink, showers, and other commercial and industrial sources and recycles the treated water for use in washing machines, showers, and other non-potable sanitary systems. This system fulfills greywater recycling needs in multiple markets, including the federal and local governments, military, industrial, commercial, mining, hospitality, multi-family residences, higher education, oil and gas, manufacturing, and disaster relief.

Beyond the Twin Ultra™ product line, our Twin Ultra Plus™ adds a reverse osmosis module for laundries processing heavily soiled fabrics where high detergent and chemical use is required.

Green Laundry Benefits Users and Environment

EVC can help commercial laundry operations that want to take their water processing and recycling even further. EVC, along with partner Water Energy Technologies, offers a first-of-its-kind Green Laundry system that combines EVC’s Twin Ultra filtration system and an innovative Ozone-Injection treatment technology.

Built to endure the toughest environmental conditions, EVC’s innovative water recycling system was developed for the U.S. Air Force’s forward operating bases. Our innovative process is fully automated to minimize operator time requirements, while achieving recycled water quality requirements without the use of biological or high chemical demand coagulation-based treatment. Water Energy’s proprietary treatment technology was originally developed for NASA. It uses ozone, which works significantly faster at destroying bacteria (through oxidation) than chlorine bleach. The process replaces laundry chemicals, eliminates much of the need for hot water, and prolongs the life of linens.

The combined green laundry system allows laundries to significantly reduce:

- Water and wastewater utility bills up to 70%-90%
- Hot water energy use by up to 90%
- Detergent use up to 70%
- Dryer use and associated energy consumption up to 40%

The green laundry system also allows many users to qualify for water, sewer, and energy utility rebates. EVC is currently targeting markets with a less than three-year return on investment, enabling laundries to quickly realize savings.

Water Evaluation Test (WET) System

Optimizing water technologies with our in-house water evaluation test cell infrastructure enables us to deliver the right water for the right use.

At EVC, we leverage research, development, test and evaluation work to produce transformative, full lifecycle, commercial solutions. In partnership with our parent company, we offer the complete ability to fully design, develop, test, prototype, and build customized solutions in support of our clients’ core mission objectives.

Our WET system enables EVC to optimize new state-of-the-art water technologies and perform worst case longevity testing for our clients’ unique needs. EVC’s ability to optimize systems before they’re delivered saves our clients time and money while ensuring performance.

Contact

Mark Pitterle, Principal Water Engineer, 814.262.2339, water@evc.ctc.com