

Case Study: California Graywater Quality Monitoring Los Angeles Cleantech Incubator (LACI) LaKretz Innovation Campus



Graywater tank being installed outside of the LACI LaKretz Innovation Campus

Reusing Graywater to Improve Water Efficiency

As water demand increases, worldwide efforts are aimed at increasing the efficiency of water use. One reusable water source is graywater. Graywater is the wastewater that comes from household water use like clothes washing machines and showers. Graywater is often disposed along with black water (toilet water). However, it is becoming more common for regulators to require the separation of graywater from blackwater in order to reuse graywater for irrigation purposes in urban areas and agriculture. California has adopted a number of policies and initiatives to reduce state-wide potable water use including the National Sanitation Foundation's (NSF) standard for graywater reuse onsite. California requires building codes to comply with the NSF standard for graywater. The NSF also has a standard for innovative treatment technologies.

California's Graywater Quality Monitoring Standards

LACI is a startup incubator for cleantech technologies with a 60,000 SF facility in downtown Los Angeles. LACI needed to continuously monitor graywater quality produced by their facility-wide graywater system to check that the system meets the NSF graywater standard and decided to use Ayyeka's remote systems for redundant monitoring of the water quality of both the influent and effluent. Ayyeka's systems will measure the following water quality parameters: DO, pH, Redox, Temperature, TSS, and Turbidity. With the water quality data collected by Ayyeka's systems, LACI will be able to determine if their system meets the NSF standard. The NSF standard is unique to California. However, as additional states begin implementing water efficiency strategies, graywater will become even more important in reducing excess potable water use and reusing treated water.