

Case Study: Russian River

Brewery champions water reuse at new brewpub



Challenge

In 2016, Russian River Brewing Company, home of the famous brews Pliny the Elder and Pliny the Younger, announced exciting plans to build a new brewpub in Windsor, California. The new brewpub was designed to nearly double their production and lay the foundation for even further expansion in the future. But with the prospect of more beer came the promise of more wastewater, a costly hook-up fee, and high sewer rates typical of the Sonoma County regulatory landscape. Where some might have seen a significant burden, owners Natalie and Vinnie Cilurzo saw an opportunity and a resource.

Solution

Commercially launched in 2015, Cambrian's aerobic **BlueCycle MBR™** was identified as the ideal solution to address Russian River's initiatives around wastewater management and water reuse. **The treatment system—an aerobic membrane bioreactor designed specifically for the food and beverage industry—treats 100% of the brewery's wastewater before sending the clean water through a reverse osmosis system for further polishing and subsequent reuse.** The system can easily expand to accommodate any increase in Russian River's production and ensure that the BlueCycle solution installed matches the brewery's specific treatment needs.

Results

The BlueCycle MBR consistently removes >99.9% of the BOD in Russian River's wastewater.

Depending on the brewery's water needs, some of the highly-treated effluent from the MBR is sent to the reverse osmosis system for further polishing and reuse in the chiller's cooling tower, CIP system for cleaning and in the brewery's steam boilers, while the remaining treated wastewater is discharged to the municipality.



The BlueCycle MBR generates continuous feedback on system performance to optimize throughput and minimize energy consumption.



Benefits

For Russian River, sustainable brewing and proactive wastewater management were two key operational goals for the Windsor brewpub. As leaders in the beer industry, it is no surprise that they were the first to install a standalone BlueCycle MBR as a means of realizing their goals and setting a precedent for other breweries.